NETWORK INFRASTRUCTURE SOLUTIONS

BADGER PART NUMBER:	Description
AL4900E01-E6	ERS 4926GTS 26-port Ethernet Switch, supporting 24 x 1000BASE-T & 2 x 10GBASE-SFP+ ports. Includes single 250W AC Power Supply, Country-specific Power Cord, Base Software License, and 0.5m Stacking Cable.
AL4900E02-E6	ERS 4926GTS-PWR+ 26-port Ethernet Switch, supporting 24 x 1000BASE-T PoE/PoE+ & 2 x 10GBASE-SFP+ ports. Includes single 1,025W AC Power Supply, Country-specific Power Cord, Base Software License, and 0.5m Stacking Cable.
AL4900E03-E6	ERS 4950GTS 50-port Ethernet Switch, supporting 48 x 1000BASE-T & 2 x 10GBASE-SFP+ ports. Includes single 250W AC Power Supply, Country-specific Power Cord, Base Software License, and 0.5m Stacking Cable.
AL4900E04-E6	ERS 4950GTS-PWR+ 50-port Ethernet Switch, supporting 48 x 1000BASE-T PoE/PoE+ & 2 x 10GBASE-SFP+ ports. Includes single 1,025W AC Power Supply, Country-specific Power Cord, Base Software License, and 0.5m Stacking Cable.
700511668	ERS 4900 Series Stacking Cable, 0.5 metre.
700511669	ERS 4900 Series Stacking Cable, 1.5 metre.
700511670	ERS 4900 Series Stacking Cable, 3.0 metre.
700511671	ERS 4900 Series Stacking Cable, 5.0 metre.
383772	ERS 4900 Advanced Software License. Enables additional functionality including: OSPF, VRRP, ECMP, PIM-SM, PIM-SSM/PIM-SSM, IPv6 Routing, and IP Shortcut Routing.

Ethernet Routing Switch 4800 Series

The Ethernet Routing Switch 4800 Series provide high bandwidth, resilient Stackable Chassis capabilities, high performance Layer 2 switching and Layer 3 routing, advanced convergence features and a full suite of security, QoS and management capabilities. The ERS 4800 hardware is based on a next-generation ASIC technology that combines wire-speed performance and non-blocking throughput with sophisticated QoS capabilities to support even the most demanding suite of applications. Positioned for customers who are looking for Gigabit Ethernet to the desktop, PoE+ technologies. These services enable customer to deal effectively with the explosion of wireless traffic and the proliferation of HD video traffic while simplifying design, deployment and management of their next-generation network. To ensure full interoperability across the complete ERS 4000 portfolio, the rear-mounted Stackable Chassis interfaces used on the ERS 4800 are consistent with those used on the other ERS 4000 models. Each ERS 4000 Stackable Chassis delivers up to 384 Gbps when eight units are combined.

- Always-on - Best in class end-to-end resiliency solution, hot-swappable unit replacement within a Stack Chassis and integrated power redundancy.
- Convergence-ready - Support for PoE and PoE+, optimized for high-definition video surveillance, true plug and play capabilities for IP Phone deployments, advanced QoS capabilities.
- Energy efficient - On average 36% more energy efficient than competitive solutions, *energy saver functionality further reduces power consumption for both Switch and IP Phone without losing telephony connectivity.
- Powerful - Wire-speed performance, true pay-as-you-grow Stackable Chassis capabilities, delivering up to 400 ports and 384 Gbps of virtual backplane throughput.
- Secure - Standards-based 802.1x with integration with Avaya's Identity Engines portfolio for centralized, policy-based authenticated network access.
- Flexible - Mix-and-match best-in-class stacking capabilities with support for PoE/PoE+ and optional 1GbE / 10GbE SFP+ uplinks.
- Future-ready - Hardware ready for advanced services such as Wireless Split-Plane and Virtual Services Fabric; emerging technologies in Avaya's fabric.

4800 Series Family

	BADGER PART NUMBER:	Name	Description
AL4800E79-E6 AL4800E89-E6	**AL4800E79-E6**	4826GTS	24 10/100/1000BASE-T ports, including 2 shared SFP Uplink ports, plus 2 additional SFP+ Uplink ports.
	AL4800E89-E6	4826GTS-PWR+	24 10/100/1000BASE-T ports supporting 802.3at PoE+, including 2 shared SFP Uplink ports, plus 2 additional SFP+ Uplink ports.
AL4800E88-E6 AL4800E78-E6	**AL4800E78-E6**	4850GTS	48 10/100/1000BASE-T ports, including 2 shared SFP Uplink ports, plus 2 additional SFP+ Uplink ports.
	AL4800E88-E6	4850GTS-PWR+	48 10/100/1000BASE-T ports supporting 802.3at PoE+, including 2 shared SFP Uplink ports, plus 2 additional SFP+ Uplink ports.
	AL1905E08-E5	ERS 4800 300W	ERS 4800 300W AC redundant power supply. For use in the ERS 4826GTS, 4850GTS. North American Power Cord
	AL1905E21-E6	ERS 4800 1000W	ERS 4800 1000W AC power supply. For use in the ERS 4826GTS-PWR, 4850GTS-PWR, ERS4526T-PWR+ and ERS4550T-PWR+. NA PC

Ethernet Routing Switch 3500 Series

The Avaya Ethernet Routing Switch (ERS) 3500 is a series of high-performance compact Ethernet switches specifically designed for SME's, branches and open environments outside of the wiring closet. A low-cost, feature rich solution, the Avaya ERS 3500 series is comprised of 10 Ethernet switching products including 24- and 48-port 10/100BASE-TX model variants and 10, 24, and 48-port 10/100/1000BaseT model variants. Several models operate in fanless mode and models which support IEEE 802.3af PoE and IEEE 802.3at PoE+ are available making this an extremely versatile product family. Suitable for SMEs looking for a reliable, cost-effective switch to provide converged services within single or multiple sites and for midsize-to-large companies looking for a compact switch to provide connectivity within remote offices, the ERS 3500 delivers the features and performance required at cost effective price points.

3500 Series Family

Fast Ethernet Models

AL3500E01-E6

BADGER PART NUMBER:	Name	Description
AL3500E01-E6	3526T	24x10/100Mbps + 2 Combo 10/100/1000 or SFP ports + 2 SFP / 2.5G rear ports.
AL3500E11-E6	3526T-PWR+	24x10/100/1000Mbps PoE + ports + 2 Combo 10/100/1000 or SFP ports + 2SFP / 2.5G rear ports. PoE budget 370W.
AL3500E02-E6	ERS 3550T	48 x 10/100 ports, plus 2 x Combo 10/100/1000BASE-T / SFP ports Stacking Cable Not Included
AL3500E12-E6	ERS 3550T-PWR+	48 x 10/100 802.3af/at PoE+, plus 2 x Combo 10/100/1000base-T/ SFP ports, PoE Budget 370W. Stacking Cable Not Included

Gigabit Ethernet Models

AL3500E04-E6
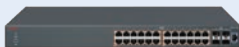
AL3500E15-E6
AL3500E11-E6
AL3500E05-E6
AL3500E01-E6

BADGER PART NUMBER:	Name	Description
AL3500E04-E6	3510GT	8x10/100/1000Mbps + 2 SFP ports. Standalone, fanless.
AL3500E14-E6	3510GT-PWR+	8x10/100/1000Mbps + 2SFP ports. Standalone. Fanless mode @ 60W PoE budget, Fan operation mode @ 170W PoE budget.
AL3500E05-E6	3524GT	24x10/100/1000Mbps with 4 shared SFP ports (combo with ports 21-24) + 2 SFP / 2.5G rear ports.
AL3500E15-E6	3524GT-PWR+	24x10/100/1000Mbps PoE + ports with 4 shared SFP ports (combo with ports 21-24) + 2 SFP / 2.5G ports. PoE budget 370W.
AL3500E06-E6	3549GTS	48 10/100/1000 non-PoE and 2 shared SFP, plus 1 1/10 Gigabit SFP+ port, plus 2 rear dual mode / stacking ports. Incl Base S/w Lic Kit. (RoHS compliant). (N America power cord). LIC:DS
AL3500E16-E6	3549GTS-PWR+	48 10/100/1000 802.3at PoE and 2 shared SFP, plus 1 1/10 Gigabit SFP+ port, plus 2 rear dual mode / stacking ports. Incl Base S/w Lic Kit. (RoHS compliant). (N America power cord). LIC:DS

Ethernet Routing Switch 4900 Series

Next-generation, high-performance, feature-rich Ethernet Switch platforms specifically optimized for the Wiring Closet demands of the mainstream Enterprise. Avaya Ethernet Routing Switch 4900 products deliver the agility to perform equally in conventional IP and Ethernet Fabric-based networking solutions.

PRODUCT HIGHLIGHTS:
- High-performance Wiring Closet Switches
- Delivers Enabled Edge for the Avaya SDN FxTM Architecture
- Agile support for Avaya Fabric Connect network virtualization technologies
- Advanced IPv4 & IPv6 Routing
- Non-blocking, wire-speed switching performance
- High-capacity Stackable Chassis architecture
- 24 or 48 ports of Gigabit Ethernet for access connectivity
- 2 ports of 10 Gigabit Ethernet for network uplink connectivity
- Optional support for full-power PoE/PoE+
- Field-replaceable AC power with optional high-availability

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Ethernet Routing Switch 5900 Series

The Ethernet Routing Switch 5900 Series provide resilient Stackable Chassis capabilities, high-performance Layer 2 switching, Layer 3 routing, advanced convergence features and a full suite of security, QoS and management capabilities.

The ERS 5900 hardware is based on next-generation ASIC technology that combines wire-speed performance and non-blocking throughput with sophisticated QoS capabilities to support even the most demanding suite of applications.

5900 Series Family

BADGER PART NUMBER:	Name	Description
AL5900E1F-E6	ERS 5928GTS	ERS 5928GTS featuring 24 x 10/100/1000BASE-T ports, plus 4 x SFP+ uplink ports, Front to Back Cooling
AL5900E2F-E6	ERS 5928GTS-PWR+	ERS 5928GTS-PWR+ featuring 24 x 10/100/1000BASE-T PoE+ ports, plus 4 x SFP+ uplink ports Front to Back Cooling
AL5900E3F-E6	ERS 5952GTS	ERS 5952GTS featuring 48 x 10/100/1000BASE-T ports, plus 4 x SFP+ uplink ports, Front to Back Cooling
AL5900E4F-E6	ERS 5952GTS-PWR+	ERS 5952GTS-PWR+ featuring 48 x 10/100/1000BASE-T PoE+ ports, plus 4 x SFP+ uplink ports, Front to Back Cooling
AL5900E1B-E6	ERS 5928GTS	ERS 5928GTS featuring 24 x 10/100/1000BASE-T ports, plus 4 x SFP+ uplink ports, Back to Front Cooling
AL5900E2B-E6	ERS 5928GTS-PWR+	ERS 5928GTS-PWR+ featuring 24 x 10/100/1000BASE-T PoE+ ports, plus 4 x SFP+ uplink ports, Back to Front Cooling
AL5900E3B-E6	ERS 5952GTS	ERS 5952GTS featuring 48 x 10/100/1000BASE-T ports, plus 4 x SFP+ uplink ports, Back to Front Cooling
AL5900E4B-E6	ERS 5952GTS-PWR+	ERS 5952GTS-PWR+ featuring 48 x 10/100/1000BASE-T PoE+ ports, plus 4 x SFP+ uplink ports, Back to Front Cooling.
AL7000E0B-E6	450 W Back2Front AC Power Supply	450W AC Power Supply with Back-to-Front Cooling
AL7000E0F-E6	450 W Front2Back AC Power Supply	450W AC Power Supply with Front-to-Back Cooling
AL1905E3B-E6	1400 W Back2Front AC Power Supply	1400W AC PoE+ Power with Back-to-Front Cooling
AL1905E3F-E6	1400 W Front2Back AC Power Supply	1400W AC PoE+ Power with Front-to-Back Cooling
AL5900BTF-E6	Spare Back2Front Fan Tray	Fan Tray for Back-to-Front Cooling on ERS 5900
AL5900FTB-E6	Spare Front2Back Fan Tray	Fan Tray for Front-to-Back Cooling on ERS 5900
380221	ERS5900 Advanced License	Advanced License for ERS 5900 (includes OSPF, PIM-SM, VRRP and ECMP)

VIRTUAL SERVICES PLATFORMS

Virtual Services Platform 4800 Series

The VSP 4000 is an industry leading fabric-enabled multiservice edge device that allows for Avaya Fabric Connect to the network edge. It provides a service-rich, cost effective platform for small deployments while supplying enterprise-wide fabric architecture that spans from the Data Center to the user's desktop. The VSP 4000 can help increase profitability and productivity, streamline business operations, lower costs and help businesses gain a competitive edge when deployed in conjunction with other Avaya Fabric Connect solutions.

EC4800E78-E6
EC4800E88-E6

BADGER PART NUMBER:	Description
EC4400E05-E6	Virtual Services Platform 4450GSX-PWR+ with 36 port 100/1000 Mbps SFP, 12 port 10/100/1000 802.3at PoE+ plus 21/10G SFP+ ports. Inc. Base Software License, 1 Field replaceable 1000W PSU
EC4800E78-E6	VSP 4850GTS with 48 10/100/1000 & 2 SFP ports plus 2 SFP+ ports. Inc. Base Software License, 1 Field replaceable 300W AC PSU. NO PC
EC4800E88-E6	VSP 4850GTS-PWR+ with 48 10/100/1000 802.3at POE+ & 2 SFP ports plus 2 SFP+ ports. Inc. Base Software License, 1 Field replaceable 1000W AC PSU. NO PC
EC4800078-E6	VSP 4820GTS with 48 10/100/1000 & 2 SFP ports plus 2 SFP+ ports. Inc. Base Software License, 1 Field replaceable 300W DC PSU. NO PC
EC4810003-3.0	ERS4800 to VSP4000 Conversion kit. Includes VSP USB software module and cover. Licensed for a single system convers Base License features. SPB L2 support.

NETWORK INFRASTRUCTURE SOLUTIONS

VIRTUAL SERVICES PLATFORMS

BADGER PART NUMBER:	Description
Redundant power supplies	
EC4005A02-E6	VSP 4000 1000W AC Redundant Power Supply (Medium-Gray). For use in the VSP4450GSX
EC4011001-E6	VSP 4000 Chassis Power Supply Filler Panel (Medium-Gray)
AL1905E08-E5	300W AC redundant power supply. For use in ERS 4626GTS, 4850GTS, VSP 4850GTS and WL8180, WL8180-16L wireless controllers [EUED RoHS 5/6 complaint]
AL1905E21-E6	STACKABLE 1000W AC POE+ POWER SUPPLY. FOR USE IN 4X00 PWR+
AL1905005-E5	Redundant 300W DC power supply. For use in the VSP 4850GTS-DC, ERS5698TFD, 5650TD and 5632FD. (EUED RoHS 5/6 complaint). DC connector included
Licenses	
EC4810010	Advanced License for any VSP4000 – "Routing" (Qty 1) GRT IP Routing including IP-Shortcuts, Inter-ISID-Routing, VRRP, DHCP-Relay, RIP, OSPF, BGP, IPv6**, SMLT**, IP-Shortcuts with Multicast support
EC4810011	Advanced License for any VSP4000 – "Routing" (Qty 10) GRT IP Routing including IP-Shortcuts, Inter-ISID-Routing, VRRP, DHCP-Relay, RIP, OSPF, BGP, IPv6**, SMLT**, IP-Shortcuts with Multicast support
EC4810012	Advanced License for any VSP4000 – "Routing" (Qty 25) GRT IP Routing including IP-Shortcuts, Inter-ISID-Routing, VRRP, DHCP-Relay, RIP, OSPF, BGP, IPv6**, SMLT**, IP-Shortcuts with Multicast support
EC4810015	Premier License for any VSP4000 – "L3 Virtualization" (Qty 1) IP VRFs, L3 VSNs incl. RIP, OSPF, BGP, Virtualized SPB Multicast
EC4810016	Premier License for any VSP4000 – "L3 Virtualization" (Qty 10) IP VRFs, L3 VSNs incl. RIP, OSPF, BGP, Virtualized SPB Multicast
EC4810017	Premier License for any VSP4000 – "L3 Virtualization" (Qty 25) IP VRFs, L3 VSNs incl. RIP, OSPF, BGP, Virtualized SPB Multicast
**Note: Feature support planned for a future release	

Open Network Adapter

The Avaya Open Network Adapter is a ruggedized, standalone Open vSwitch implementation that enables the auto-attachment – leveraging Fabric Attach – of non-networking devices to Avaya Fabric Connect. It is Fabric Attach that empowers ease of deployment. Avaya has taken a fully standard OVS implementation, packaged it appropriately to make it field-deployable, and added a management capability to make it efficient and useful. ONA is, essentially, OVS-in-a-box, enabling simple, scalable, and cost-effective service agility for legacy business end-points.

BADGER PART NUMBER:	Description
EC1100010-E6	ONA 1101GT 1 NETWORK+1 DEVICE 10/100/1000 BASE-T PORT. POWER FROM POE/POE+/uPOE. OPTIONAL POWER ADAPTER SOLD SEPARATELY.
EC1105E11-E6	SPARE 100-240V AC POWER ADAPTER (TYPE A PLUG USED IN NA, CA & JP) FOR ONA 1101GT.

EC1100010-E6

Virtual Services Platform 7254 Series

The Avaya Virtual Services Platform 7200 Series is purpose-built to support the dynamic Data Center and high-density 10 Gigabit Ethernet Top-of-Rack deployments of today. It alleviates infrastructure complexity and reduces power consumption with a truly scalable and strategic architecture; it is designed to be the high-performance Top-of-Rack platform for the future.

Supporting mission-critical applications requires 24/365 always-on infrastructure, and the VSP 7200 delivers against this challenge. It is a highly strategic product that is fit-for-purpose for today's connectivity requirements and future-ready for the evolving and emerging application-driven needs of tomorrow.

7254 Series Family

Avaya brings unique differentiation to the ToR role: with a flexible, non-blocking architecture, including wire-speed Server access connections and high-speed Distributed Top-of-Rack connections. The VSP 7200 Series is purpose-built to support today's dynamic Data Center operations and high-density, low-latency 10 Gigabit Ethernet Top-of- Rack deployments. It alleviates infrastructure complexity and reduces power consumption with a truly scalable and strategic architecture; it is designed to deliver a high-performance Distributed Top-of-Rack solution that fully optimizes next-generation application virtualization investments.

VIRTUAL SERVICES PLATFORMS

BADGER PART NUMBER:	Name	Description
EC720001F-E6	VSP 7254 DC Power Supply Front to Back Cooling	VSP 7254XSQ with 48 1/10G SFP+ and 6 40G QSFP+ ports with front to back cooling & 1 DC PSU. Includes base license, fan modules and dc psu. Pluggable transceivers and optional rack mount kit sold separately.
EC720002F-E6	VSP 7254 DC Power Supply Back to Front Cooling	VSP 7254XTQ with 48 100M/1G/10GBASE-T and 6 40G QSFP+ ports with front to back cooling & 1 DC PSU. Includes base license, fan modules and dc psu. Pluggable transceivers and optional rack mount kit sold separately.
EC7200E1F-E6	VSP 7254 AC 460W Power Supply Front to Back Cooling	VSP 7254XSQ with 48 1/10G SFP+ and 6 40G QSFP+ ports with front to back cooling, 1 AC PSU (na power cord). Includes base license, fan modules, ac psu and na power cord. Pluggable transceivers and optional rack mount kit sold separately.
EC7200E1B-E6	VSP 7254 AC 460 WPower Supply Back to Front Cooling	VSP 7254XSQ with 48 1/10G SFP+ and 6 40G QSFP+ ports with back to front cooling, 1 AC 460 W PSU (na power cord). Includes base license, fan modules, ac psu and na power cord. Pluggable transceivers and optional rack mount kit sold separately.
EC7200E2F-E6	VSP 7254 AC 800W Power Supply Front to Back Cooling	VSP 7254XTQ with 48 100M/1G/10GBASE-T and 6 40G QSFP+ ports with front to back cooling, 1 AC 800W PSU (na power cord). Includes base license, fan modules, ac psu and na power cord. Pluggable transceivers and optional rack mount kit sold separately.
EC7200E2B-E6	VSP 7254 AC 800W Power Supply Back to Front Cooling	VSP 7254XTQ with 48 100M/1G/10GBASE-T and 6 40G QSFP+ ports with back to front cooling, 1 AC 800W PSU (na power cord). Includes base license, fan modules, ac psu and na power cord. Pluggable transceivers and optional rack mount kit sold separately.
EC8011002-E6	Universal Slide Rack Mount Kit	Universal Slide Rack Mount Kit (300mm - 900mm) can be used for VSP 7200
EC7205E1B-E6	VSP 7200 460 W AC Power Supply (Back to Front Cooling)	VSP 7200 460W AC power supply back to front cooling (NA power cord)
EC7205E1F-E6	VSP 7200 460 W AC Power Supply (Front to Back Cooling)	VSP 7200 460W AC power supply front to back cooling (NA power cord)
EC7205E0B-E6	VSP 7200 800 W AC Power Supply (Back to Front Cooling)	VSP 7200 800W AC power supply back to front cooling (NA power cord)
EC7205E0F-E6	VSP 7200 800 W AC Power Supply (Front to Back Cooling)	VSP 7200 800W AC power supply front to back cooling (NA power cord)
EC7200BTF-E6	Spare VSP Front to Back Fan Module	VSP 7200 spare fan module front to back cooling (3 required per switch)
EC7200FTB-E6	Spare VSP Back to Front Fan Module	VSP 7200 spare fan module back to front cooling (3 required per switch)
EC7200SU1	VSP 7200 Software Upgrade	Virtual Services Platform 7200 base software upgrade - 12 month term. Must be purchased in conjunction with support services order code gw6300xxx.

Virtual Services Platform 8200 Series

The Avaya VSP8200 is the first Compact-Form-Factor (CCF) Ethernet Switch that is programmed to provide sophisticated yet simplified functionality for deployments ranging from the mid-market through large enterprises. The switch delivers high port density (10/40 Gigabit Ethernet connectivity), an attractive price per port and low entry price point, enhanced power efficiency, reduced maintenance, has a small physical footprint and allows for seamless scalability. The VSP8200 Supports both Fabric-based virtualized networks and conventional IP Routing deployments.

8200 Series Family

BADGER PART NUMBER:	Description
EC8200E01-E6	Virtual Services 8284XSQ with 80 10G SFP+ and 4 40G QSFP+ ports, 1 800W AC PS (NA Power Cord). Optional Slide Rack Mount Kit available. Note: Includes Base License & Fan Trays. Pluggable transceivers sold separately.
EC8200001-E6	Virtual Services Platform 8284XSQ with 80 x 10GBASE-SFP+ and 4 x40GBASE-QSFP+, 1 800W DC Power Supply. Note: Includes Base License, Fan Trays. Pluggable transceivers and optional rack mount kit sold separately.
EC8005E01-E6	VSP 8000 100-240V 800W AC Power Supply (NA power cord)
EC8005001-E6	VSP 8000 800W DC POWER SUPPLY
EC8011003-E6	VSP 8000 Chassis Power Supply Filler Panel
EC8011004-E6	VSP 8200 CHASSIS SPARE FAN TRAY
380176	VSP 8000 PLDS PREMIER LICENSE FOR 1 CHASSIS LIC:DS
380177	VSP 8000 PLDS PREMIER LICENSE W/MACSEC FOR 1 CHASSIS LIC:DS
380178	VSP 8000 PLDS TRIAL LICENSE LIC:DS
380179	VSP 8000 PLDS TRIAL LICENSE W/MACSEC LIS:DS
380800	VSP 8000 PLDS PREMIER TO PREMIER W/MACSEC UPLIFT LIC LIC:DS
EC8200SU1	VIRTUAL SERVICES PLATFORM 8200 BASE SOFTWARE UPGRADE - 12 MONTH TERM. MUST BE PURCHASED IN CONJUNCTION WITH SUPPORT SERVICES ORDER CODE GW6300ERS.

NETWORK INFRASTRUCTURE SOLUTIONS

Virtual Services Platform 8400 Series

The VSP 8404 is a flexible, compact form-factor Ethernet Switch that features four expansion slots for 8400 Series Ethernet Switch Modules (ESMs). Therefore, in its basic form the 8404 is a "zero port" Ethernet Switch; it includes everything to function as a standalone Switch- switching fabric, memory, power, fans, etc - with the rather obvious exception of physical ports, these being provided by the in-field addition of ESMs.

8400 Series Family

BADGER PART NUMBER:	Description
EC8400E01-E6	VSP 8400 CHASSIS WITH 4 IO MODULE SLOTS, 1 800 W AC POWER SUPPLY INCLUDED (NA POWER CORD). NOTE: INCLUDES BASE LICENSE, 4 FAN TRAYS. PLUGGABLE TRANSCEIVERS AND OPTIONAL RACK MOUNT KIT SOLD SEPARATELY.
EC8400001-E6	VSP 8400 CHASSIS WITH 4 IO MODULE SLOTS, 1 800 W DC POWER SUPPLY INCLUDED. NOTE: INCLUDES BASE LICENSE, 4 FAN TRAYS. PLUGGABLE TRANSCEIVERS AND OPTIONAL RACK MOUNT KIT SOLD SEPARATELY.
EC8404001-E6	8424XS ETHERNET SWITCH MODULE - 24 PORT 1/10G SFP+. PLUGGABLE TRANSCEIVERS SOLD SEPARATELY.
EC8404002-E6	8424XT ETHERNET SWITCH MODULE - 24 PORT 100M/1G/10G BASE-T
EC8404003-E6	8408QQ ETHERNET SWITCH MODULE - 8 PORT 40G QSFP+. PLUGGABLE TRANSCEIVERS SOLD SEPARATELY.
EC8404005-E6	8418XSQ ETHERNET SWITCH MODULE - 16 PORT 1/10G SFP+ & 2 PORT 40G QSFP+ COMBINATION. PLUGGABLE TRANSCEIVERS SOLD SEPARATELY.
EC8011005-E6	VSP 8400 CHASSIS SPARE FAN MODULE (QUANTITY - 1)
EC8411002-E6	VSP 8400 ETHERNET SWITCH MODULE FILLER PANEL

Virtual Services Platform 9000 Series

The Avaya Virtual Services Platform 9000 is designed for next-generation data centers and large campus core applications. It delivers industry-leading performance and scalability, with immediate support for high-density 1 and 10 Gigabit Ethernet connectivity, while also supporting the emerging 40 and 100 Gigabit Ethernet standards.

The architecture helps ensure that network capacity can scale seamlessly in line with evolving performance requirements, without complex or expensive re-engineering.

The Virtual Services Platform 9000 is an ultra-reliable platform, helping to ensure uninterrupted business operations. The reduced management complexity and simplified network also helps to lower operating costs.

The Virtual Service Platform 9000 delivers ten I/O Module slots in a compact 14RU form-factor; one 7-foot rack can hold three VSP 9000 Chassis.

9000 Series Family

BADGER PART NUMBER:	Name	Description
EC1402001-E6	9012	12-Slot Chassis with 10 Interface Module Slots
EC1404006-E6	9090SF	1.4Tbps Switch Fabric Module
EC1404007-E6	9080CP	Control Processor Module
EC1404001-E6	9024XL	24-port 10G Ethernet SFP+ Interface Module
EC1404003-E6	9048GT	48-port 1000BASE-T Ethernet Interface Module
EC1404002-E6	9048GB	48-port 1G Ethernet SFP Interface Module
EC1405A01-E6	9006AC	2kW Power Supply

EdgeMarc 4550

The EdgeMarc 4550 is a flexible, application ready enterprise session border controllers that can be deployed initially as a low-cost WAN access router and expanded to other applications such as hosted VoIP, SIP trunking and enterprise video over IP. It is the ideal platform for service providers offering Ethernet for converged VoIP networks. Concurrent call licenses available: 5 – 90. One WAN Ethernet port. Four LAN Ethernet ports. 10 Mb/s voice and data performance. 12 VPN tunnels.

EdgeMarc 4550

BADGER PART NUMBER:	Name	Description
EM-4550-1-4-0-0-0-0-5	4550: EdgeMarc 5	4550: EdgeMarc 5 Intelligent Edge Solution - 4LAN, 1WAN, 2USB
EM-4550-1-4-0-0-0-0-10	4550: EdgeMarc 10	4550: EdgeMarc 10 Intelligent Edge Solution - 4LAN, 1WAN, 2USB
EM-4550-1-4-0-0-0-0-15	4550: EdgeMarc 15	4550: EdgeMarc 15 Intelligent Edge Solution - 4LAN, 1WAN, 2USB
EM-4550-1-4-0-0-0-0-30	4550: EdgeMarc 30	4550: EdgeMarc 30 Intelligent Edge Solution - 4LAN, 1WAN, 2USB
EM-4550-1-4-0-0-0-0-50	4550: EdgeMarc 50	4550: EdgeMarc 50 Intelligent Edge Solution - 4LAN, 1WAN, 2USB
EM-4550-1-4-0-0-0-0-70	4550: EdgeMarc 70	4550: EdgeMarc 70 Intelligent Edge Solution - 4LAN, 1WAN, 2USB
EM-4550-1-4-0-0-0-0-90	4550: EdgeMarc 90	4550: EdgeMarc 90 Intelligent Edge Solution - 4LAN, 1WAN, 2USB

EdgeMarc 4700

The EdgeMarc 4700 combines advanced real-time, high availability, management, networking, security features, and capabilities for voice and data services into a single, easy to use enterprise session border controller. The EdgeMarc 4700 delivers superior performance for multiple simultaneous services including voice, voice quality monitoring, traffic management, high capacity data throughput and firewall. It is the ideal solution for small and medium business, and service provider managed services such as SIP trunking and hosted IP telephony. It supports 5 – 100 concurrent calls, with up to 100 Mbps symmetric data rate.

EdgeMarc 4700

BADGER PART NUMBER:	Name	Description
4700-100-0005	4700: EdgeMarc 5	4700: EdgeMarc 5 Intelligent Edge Solution - 8LAN, 2WAN
4700-100-0010	4700: EdgeMarc 10	4700: EdgeMarc 10 Intelligent Edge Solution - 8LAN, 2WAN
4700-100-0015	4700: EdgeMarc 15	4700: EdgeMarc 15 Intelligent Edge Solution - 8LAN, 2WAN
4700-100-0030	4700: EdgeMarc 30	4700: EdgeMarc 30 Intelligent Edge Solution - 8LAN, 2WAN
4700-100-0050	4700: EdgeMarc 50	4700: EdgeMarc 50 Intelligent Edge Solution - 8LAN, 2WAN
4700-100-0070	4700: EdgeMarc 70	4700: EdgeMarc 70 Intelligent Edge Solution - 8LAN, 2WAN
4700-100-0100	4700: EdgeMarc 100	4700: EdgeMarc 100 Intelligent Edge Solution - 8LAN, 2WAN

EdgeMarc 4750

The EdgeMarc 4750 combines advanced real-time, high availability, management, networking, security features, and capabilities for voice and data services into a single, easy to use enterprise session border controller. The EdgeMarc 4750 delivers superior performance for multiple simultaneous services including voice, voice quality monitoring, traffic management, high capacity data throughput and firewall. It is the ideal solution for small and medium business, and service provider managed services such as SIP trunking and hosted IP telephony. Supports 15 – 300 concurrent calls at a 100 Mbps data rate.

EdgeMarc 4750

BADGER PART NUMBER:	Name	Description
4750-100-0015	4750: EdgeMarc 15	4750: EdgeMarc 15 Intelligent Edge Solution - 8LAN, 2WAN
4750-100-0030	4750: EdgeMarc 30	4750: EdgeMarc 30 Intelligent Edge Solution - 8LAN, 2WAN
4750-100-0050	4750: EdgeMarc 50	4750: EdgeMarc 50 Intelligent Edge Solution - 8LAN, 2WAN
4750-100-0070	4750: EdgeMarc 70	4750: EdgeMarc 70 Intelligent Edge Solution - 8LAN, 2WAN
4750-100-0100	4750: EdgeMarc 100	4750: EdgeMarc 100 Intelligent Edge Solution - 8LAN, 2WAN
4750-100-0300	4750: EdgeMarc 300	4750: EdgeMarc 300 Intelligent Edge Solution - 8LAN, 2WAN

NETWORK INFRASTRUCTURE SOLUTIONS

EdgeMarc 4800

The EdgeMarc 4800 combines advanced real-time, high availability, management, networking, security features, and capabilities for voice and data services into a single, easy to use enterprise session border controller. The EdgeMarc 4800 delivers superior performance for multiple simultaneous services including voice, voice quality monitoring, traffic management, high capacity data throughput and firewall. It is the ideal solution for small and medium business, and service provider managed services such as SIP trunking and hosted IP telephony. Supports 10 – 500 concurrent calls at a 100 Mbps data rate.

EdgeMarc 4800

BADGER PART NUMBER:	Name	Description
4800-100-0010	4800: EdgeMarc 10	4800: EdgeMarc 10 Intelligent Edge Solution - 8LAN, 2WAN
4800-100-0015	4800: EdgeMarc 15	4800: EdgeMarc 15 Intelligent Edge Solution - 8LAN, 2WAN
4800-100-0030	4800: EdgeMarc 30	4800: EdgeMarc 30 Intelligent Edge Solution - 8LAN, 2WAN
4800-100-0050	4800: EdgeMarc 50	4800: EdgeMarc 50 Intelligent Edge Solution - 8LAN, 2WAN
4800-100-0070	4800: EdgeMarc 70	4800: EdgeMarc 70 Intelligent Edge Solution - 8LAN, 2WAN
4800-100-0100	4800: EdgeMarc 100	4800: EdgeMarc 100 Intelligent Edge Solution - 8LAN, 2WAN
4800-100-0300	4800: EdgeMarc 300	4800: EdgeMarc 300 Intelligent Edge Solution - 8LAN, 2WAN
4800-100-0500	4800: EdgeMarc 500	4800: EdgeMarc 500 Intelligent Edge Solution - 8LAN, 2WAN
4800-100-1000	4800: EdgeMarc 1000	4800: EdgeMarc 1000 Intelligent Edge Solution - 8LAN, 2WAN

EdgeMarc 4806

Edgewater Networks EdgeMarc Multi-Service Gateways provides both PSTN gateway functions to support PRI and analog trunks, as well as an Enterprise Session Border Controller (ESBC) for security and Quality of Service (QoS) management of VoIP services. WAN interfaces include both Ethernet and optical, enabling the EdgeMarc 4806 to operate as an optical termination device. Edgewater Networks EdgeMarc 4806 are optimized to support the demanding needs of enterprises, supporting 1 Gb/sec symmetric WAN connections with up to 200 concurrent calls.

EdgeMarc 4806

BADGER PART NUMBER:	Name	Description
4806-102-25	4806: EdgeMarc 25, 2 T1/PRI	4806: EdgeMarc 25 Intelligent Edge Solution - 2WAN, 8LAN, 6 FXS, 2 FXO and 2 T1/PRI Ports
4806-102-50	4806: EdgeMarc 50, 2 T1/PRI	4806: EdgeMarc 50 Intelligent Edge Solution - 2WAN, 8LAN, 6 FXS, 2 FXO and 2 T1/PRI Ports
4806-102-75	4806: EdgeMarc 75, 2 T1/PRI	4806: EdgeMarc 75 Intelligent Edge Solution - 2WAN, 8LAN, 6 FXS, 2 FXO and 2 T1/PRI Ports
4806-102-100	4806: EdgeMarc 100, 2 T1/PRI	4806: EdgeMarc 100 Intelligent Edge Solution - 2WAN, 8LAN, 6 FXS, 2 FXO and 2 T1/PRI Ports
4806-102-200	4806: EdgeMarc 200, 2 T1/PRI	4806: EdgeMarc 200 Intelligent Edge Solution - 2WAN, 8LAN, 6 FXS, 2 FXO and 2 T1/PRI Ports

EdgeMarc 4808

Edgewater Networks EdgeMarc Multi-Service Gateways provides both PSTN gateway functions to support PRI and analog trunks, as well as an Enterprise Session Border Controller (ESBC) for security and Quality of Service (QoS) management of VoIP services. WAN interfaces include both Ethernet and optical, enabling the EdgeMarc 4808 to operate as an optical termination device. Edgewater Networks and EdgeMarc 4808 are optimized to support the demanding needs of enterprises, supporting 1 Gb/sec symmetric WAN connections with up to 500 concurrent calls.

EdgeMarc 4808

BADGER PART NUMBER:	Name	Description
4808-102-50	4808: EdgeMarc 50, 2 T1 or PRI	4808: EdgeMarc 50 Intelligent Edge Solution - 2WAN, 8LAN, 22 FXS, 2 FXO and 2 T1/PRI
4808-102-100	4808: EdgeMarc 100, 2 T1 or PRI	4808: EdgeMarc 100 Intelligent Edge Solution - 2WAN, 8LAN, 22 FXS, 2 FXO and 2 T1/PRI
4808-102-300	4808: EdgeMarc 300, 2 T1 or PRI	4808: EdgeMarc 300 Intelligent Edge Solution - 2WAN, 8LAN, 22 FXS, 2 FXO and 2 T1/PRI
4808-102-500	4808: EdgeMarc 500, 2 T1 or PRI	4808: EdgeMarc 500 Intelligent Edge Solution - 2WAN, 8LAN, 22 FXS, 2 FXO and 2 T1/PRI

edgewater
NETWORKS

EdgeMarc 7301

The EdgeMarc 7301 combines advanced voice and data features alongside a full suite of networking capabilities into a single, easy to use enterprise session border controller. The EdgeMarc 7301 delivers superior performance for multiple simultaneous services including voice, voice quality monitoring, traffic management, high capacity data throughput and firewall. It is the ideal solution for medium business, large enterprise, and service provider managed services. Supporting up to 1,000 concurrent calls and 8,000 registered devices, the EdgeMarc 7301 easily scales to support medium and large office deployments and is the ideal solution for converged IP voice and data networks requiring high performance and delivers telecom service cost savings, comprehensive security, high quality and reliable voice service, and simplified management. The EdgeMarc 7301 is equipped with multi-LAN GigE ports.

EdgeMarc 7301

BADGER PART NUMBER:	Name	Description
7301-100-0050	7301: EdgeMarc 50	7301: EdgeMarc 50 Intelligent Edge Solution
7301-100-0100	7301: EdgeMarc 100	7301: EdgeMarc 100 Intelligent Edge Solution
7301-100-0300	7301: EdgeMarc 300	7301: EdgeMarc 300 Intelligent Edge Solution
7301-100-0500	7301: EdgeMarc 500	7301: EdgeMarc 500 Intelligent Edge Solution
7301-100-1000	7301: EdgeMarc 1000	7301: EdgeMarc 1000 Intelligent Edge Solution
7301-100-2000	7301: EdgeMarc 2000	7301: EdgeMarc 2000 Intelligent Edge Solution

EdgeMarc - Virtual Platform

All EdgeMarc Intelligent Edges are available in a virtual instance.

BADGER PART NUMBER:	Name	Description
VRKVMP-100-SYS	VEM: KVM Based EdgeMarc	VEM: KVM Based EdgeMarc
VRVMP-100-SYS	VEM: VMWare Based EdgeMarc	VEM: VMWare Based EdgeMarc

EDGEVIEW SERVICE CONTROL CENTER

EdgeView Service Control Center

With EdgeView Service Control Center, network operators are able to remotely identify and resolve network impairments that negatively affect VoIP call quality. This reduces overall costs, shortens problem resolution times, and improves the end-user experience.

EdgeView enables service providers and enterprise customers to easily scale their VoIP service through the central management and monitoring of Edgewater Networks' EdgeMarc Intelligent Edges. It provides device management, VoIP performance monitoring and troubleshooting, performance reporting and the automated provisioning of many VoIP devices.

The EdgeView Service Control Center provides device and network monitoring capabilities including MOS scoring and reporting from EdgeMarc Intelligent Edges. Users are able to monitor and control EdgeMarcs including firmware upgrades, configuration changes, backups and restore, password management and web proxy access through the EdgeView GUI.

NETWORK INFRASTRUCTURE SOLUTIONS

NETWORK INFRASTRUCTURE SOLUTIONS

EWS360AP

Neutron Dual-Band 3x3 Wireless Managed Indoor Access Point

• Stand-alone AP or part of scalable Neutron NW Mgmt. Solution featuring ezMaster Software
• Supports 802.11a/b/g/n/ac speeds up to 1300 Mbps

BADGER PART NUMBER:
EWS360AP

EWS360AP

EWS500AP

Neutron Wireless Wall Plate 2x2 Managed Access Point/Switch

• Installs onto a standard J-box for in-room wireless, PoE & wired connections
• Quick/easy to deploy in hotel guest rooms, student residences, retirement facilities, multi-tenant dwellings, classrooms
• 2.4 GHz single-band, 802.11b/g/n wireless support, max. speed 300Mbps
• (3) 10/100Mbps data ports for in-room connectivity of IPTVs, networked mini-bars, printers, gaming consoles, etc.
• (1) 10/100Mbps data port w/802.11af/at PoE for powering VoIP phones
• (1) RJ45 pass-through port to connect phones/fax machines

BADGER PART NUMBER:
EWS500AP

EWS510AP

Neutron Dual-Band Wireless Wall Plate 2x2 Managed Access Point/Switch

• Installs onto a standard J-box for in-room wireless, PoE & wired connections
• Quick/easy to deploy in hotel guest rooms, student residences, retirement facilities, multi-tenant dwellings, classrooms
• 2.4/5 GHz dual-band, 802.11b/g/n wireless support, max. speed 300Mbps per band
• (3) 10/100Mbps data ports for in-room connectivity of IPTVs, networked mini-bars, printers, gaming consoles, etc.
• (1) 10/100Mbps data port w/802.11af/at PoE for powering VoIP phones
• (1) RJ45 pass-through port to connect phones/fax machines

BADGER PART NUMBER:
EWS510AP

EWS510AP

EWS320AP

Neutron Dual-Band Wireless Managed Indoor Access Point

• Stand-alone AP or part of scalable Neutron NW Mgmt. Solution featuring ezMaster Software
• Supports 802.11a/b/g/n speeds to 450 Mbps

BADGER PART NUMBER:
EWS320AP

EWS320AP

EWS300AP

Neutron Indoor Ceiling-Mount Wireless 2x2 2.4GHz Managed Access Point

• Low profile, 2.4 GHz single-band, affordable for large homes/small biz
• Supports 802.11b/g/n wireless, max. speed 300Mbps, (1) GigE PoE 802.3af port
• (2) Internal 5 dBi 2x2:2 antenna, Fast Roaming, Guest Network, SSID-to-VLAN
• Stand-alone AP or part of a scalable Neutron NW Mgmt. Solution featuring ezMaster software
• No license, subscription or tech support fees, deploy ezMaster locally, remotely or via the Cloud
• Scalable/flexible-manage a few or 1,000+ APs/Switches in various locations

BADGER PART NUMBER:
EWS300AP

EWS310AP

Neutron Dual-Band 2x2 Wireless Managed Indoor Access Point

• Stand-alone AP or part of a scalable Neutron NW Mgmt. Solution featuring ezMaster software
• Scalable/flexible-managed few or 1k+APs/Switches
• Supports 802.11a/b/g/n speeds to 300Mbps
• 4 5dBi Internal MIMO Antennas

BADGER PART NUMBER:
EWS310AP

EWS310AP

EWS660AP

Neutron Dual Band 11ac Wireless 3x3 Managed Outdoor Access Point

• Stand-alone AP or part of scalable Neutron NW Mgmt. Solution featuring ezMaster Software
• Supports 802.11a/b/g/n/ac speeds to 1300 Mbps on 5GHz; 450 on 2.4 GHz
• 6 5dBi Internal High Gain Antennas
• Dual-Gigabit Ports; IP55-Rated Waterproof Housing

BADGER PART NUMBER:
EWS660AP

EWS660AP

EWS860AP

Neutron Dual Band 11ac Wireless 3x3 Managed Outdoor Access Point

• Stand-alone AP or part of scalable Neutron NW Mgmt. Solution featuring ezMaster Software
• No license/subscription fees
• 6 Removable external high gain antennas
• Dual-Gigabit Ports; IP68-Rated Waterproof Housing

BADGER PART NUMBER:
EWS860AP

EWS860AP

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TRAINING

Choose our introductory classes to refresh or take your first steps into the world of Avaya and IP Office.

You can even sell an IP Office and program it during training at Badger.

NETWORK INFRASTRUCTURE SOLUTIONS

ECB600

Indoor Wireless Access Point/ Ethernet Bridge, Dual-Band N600

- Dual-Band 11n Speeds to 300Mbps on 5GHz; to 300Mbps on 2.4GHz
- High 29dBm Transmit Power on 2.4GHz; 26dBm on 5GHz Enabling Greater Range & Penetration
- 4 Far-Reaching, Detachable Omni- Directional 5dBi Antennas; 2 Per Band
- 802.3at PoE-Compliant Port Offers Flexible Deployment & Power Options
- Multi-Mounting Options with Desk, Wall or Ceiling-Mount-Ready Holes
- Versatile Mode Support: AP, Client Bridge & WDS AP/Station/Bridge

BADGER PART NUMBER:
ECB600

ECB600

ECB1200

Indoor Wireless Access Point/ Ethernet Bridge, Dual-Band AC1200

- Dual-Band 11ac Speeds to 866Mbps on 5GHz; to 300Mbps on 2.4GHz
- Strong 29dBm Transmit Power Ensures Greater Range & Multi-Floor Penetration
- 4 Far-Reaching, Detachable 5dBi Omni- Directional Antennas; 2 Per Band
- PoE-Compliant Port Offers More Deployment & Power Options
- Flexible Mounting Options With Desk, Wall or Ceiling-Mount-Ready Holes
- Versatile, Operation Mode Support: AP, Client Bridge, WDS AP, WDS Station & WDS Bridge

BADGER PART NUMBER:
ECB1200

ECB1200

EAP1200H

Indoor Wireless Access Point, Dual- Band AC1200

- Dual-Band 11ac Speeds to 866Mbps on 5GHz; to 300Mbps on 2.4GHz
- Low-Profile Ceiling-Mount Option with Included Mounting T-Rail
- Solid 26dBm Transmit Power Extends Wireless Performance Range
- 4 Internal, 5dBi Antenna Array Minimizes Interference for Enhanced Reliability
- 802.3at-Compliant POE Port Expands Deployment & Power Choices
- Versatile, Multi-Mode Support: AP, WDS Bridge & WDS AP
- Band Steering Optimizes Network Traffic

BADGER PART NUMBER:
EAP1200H

EAP1200H

EAP300

High-Powered, Long-Range Ceiling-Mount, Wireless N300 AP

- Long-Range, 800mW Tx Power
- Wireless-N AP and WDS Bridge
- 300 Mbps / 2.4GHz
- 1 Fast Ethernet Port / PoE

BADGER PART NUMBER:
EAP300

EAP300

EAP350

High-Powered, Long Range Ceiling Mount Wireless N300 Indoor AP

- Long-Range, 800mW Tx Power
- Wireless-N AP and WDS Bridge
- Up to 300 Mbps / 2.4GHz
- (1) Gigabit Ethernet Port / PoE

BADGER PART NUMBER:
EAP350

EAP350

EAP600

Indoor Wireless Access Point, Dual- Band N600

- Dual-Band 11n Speeds to 300Mbps on 2.4 GHz; to 300Mbps on 5GHz
- Low-Profile Ceiling-Mount Option with Included Mounting T-Rail
- High 29dBm Transmit Power on 2.4GHz; 26dBm on 5GHz Ensures Greater Range & Penetration
- 4 Wide-Extending, 5dBi, Integrated Omni Antenna Array Minimizes Interference
- 802.3at-Compliant PoE Port Expands Deployment & Power Options
- Versatile, Operation Mode Support: AP, WDS Bridge & WDS Access Point

BADGER PART NUMBER:
EAP600

EAP600

EnGenius®

EWS2910P

Neutron 8-Port GigE 61.6W PoE+ WLAN Controller/Switch

- (8) 10/100/1000Mbps, 802.3af PoE+ ports w/(2) SFP ports; desktop model
- Full-featured Layer 2 PoE Switch & WLAN for up to 20 Neutron APs
- Part of a scalable Neutron NW Mgmt. Solution featuring ezMaster software
- Scalable, Simple to use, Managed and Deploy
- Rich reporting & analytics, SmartSynch Redundancy w/Neutron APs & ezMaster
- Topology view automatically maps & displays network devices & relationships

BADGER PART NUMBER:
EWS2910P

EWS2910P

EWS2910P-KIT-300

Neutron WLAN Starter Kit

- Create or expand a high-speed wireless network with this ready-to-deploy, affordable WLAN pack for large homes/small biz
- Stand-alone AP/Switch or part of a scalable Neutron NW Mgmt. Solution featuring ezMaster software
- Scalable, Simple to use, Managed and Deploy
- Kit includes: (1) 8-port GigE 61E WLAN Controller Switch (manage up to 20 APs); (2) EWS300AP 2x2 2.4GHz Ceiling-Mount Wireless Managed APs

BADGER PART NUMBER:
EWS2910P

EWS5912FP

Neutron 8-Port GigE 130W PoE+ WLAN Mgmt. Controller Switch w/2 SFP Ports

- Manage and monitor up to 50 Neutron Series Wireless Access Points

BADGER PART NUMBER:
EWS5912FP

EWS5912FP

EWS7928FP

Neutron 24-Port GigE 370W PoE+ WLAN Mgmt. Controller Switch w/4 SFP Ports

BADGER PART NUMBER:
EWS660AP

EWS7928FP

EWS7928P

Neutron 24-Port GigE 185W PoE+ WLAN Mgmt. Controller Switch w/4 SFP Ports

BADGER PART NUMBER:
EWS7928P

EWS7928P

EWS7952FP

Neutron 48-Port GigE 740W PoE+ WLAN Mgmt. Controller Switch w/4 SFP Ports

BADGER PART NUMBER:
EWS7952FP

EWS7952FP

ECB350

High-Powered, Long-Range Wireless N300 Indoor Access Point/Client Bridge w/Gigabit

- High-powered, long-range Wi-Fi
- Multi-mode operation: AP, Client Bridge, Universal Repeater, WDS Bridge, WDS AP, WDS Station, AP Router, Client Router
- 2.4 GHz 802.11b/g/n with speeds up to 300Mbps
- (1) GigE port w/802.3af PoE support
- Includes free EZ Controller software to control/maintain wireless network

BADGER PART NUMBER:
ECB350

ECB300

ECB1750

Indoor Wireless Access Point/Ethernet Bridge, Dual-Band AC1750

- Dual-Band 11ac Speeds to 1300Mbps on 5GHz; to 450Mbps on 2.4GHz
- Strong 29dBm Transmit Power Ensures Greater Range & Multi-Floor Penetration
- 6 Wide-Reaching, Detachable 5dBi Omni-Directional Antennas; 3 Per Band
- PoE-Compliant Port for Greater Deployment & Power Options
- Flexible Mounting Options With Desk, Wall or Ceiling-Mount-Ready Holes
- Versatile Operation Mode Support: AP, Client Bridge, WDS AP, WDS Station & WDS Bridge

BADGER PART NUMBER:
ECB1750

ECB1750

NETWORK INFRASTRUCTURE SOLUTIONS

NETWORK INFRASTRUCTURE SOLUTIONS

EnStation delivers high-performance, robust range up to 5 miles when paired with another EnStation. They can also be used in Client Bridge mode to extend Point-to-Point or Point-to-Multipoint Networks.

ENSTATION2

Outdoor, Long-Range N300 Ethernet Bridge, 2.4 GHz

• Strong 13dBi High-Gain Antennas Extend Networks to 5 Miles Pt.-to-Pt.

• 11n Wireless up to 300Mbps on 2.4GHz; to 90Mbps at ½ Mile

• PoE Port & Injector Extends Power to Unwired Areas; Connect Remote IP Cameras or APs via 2nd Port

• Narrow-Focused Wireless Beam Reduces Interference over Long-Ranges

• Rugged IP55-Rated Waterproof Case Defies Harsh Climates

• 360-Degree, 3-axis pivoting arm locks for precise alignment with wall & pole mount

BADGER PART NUMBER:
EnStation2

ENSTATION2

ENSTATION5

Outdoor Long-Range N300 Ethernet Bridge, 5Ghz

• Powerful, 19 dBi High-Gain Antennas Extend Networks to 5 Miles Pt.-to-Pt.

• 11n Wireless Speeds to 300Mbps on 5GHz; to 90Mbps at ½ Mile

• PoE Port & Injector Extends Power to Unwired Areas; Connect Remote IP Cameras or APs via 2nd Port

• Narrow-Focused Wireless Beam Reduces Interference over Long-Ranges

• Rugged IP55-Rated Waterproof Case Defies Harsh Climates

• 360-Degree, 3-axis pivoting arm locks for precise alignment with wall & pole mount

BADGER PART NUMBER:
EnStation5

ENSTATION5

ENSTATIONAC

Outdoor Long-Range 11ac Wireless Bridge

• Powerful, 19dBi High-Gain Antennas Extend Networks to 5 Miles Pt.-to-Pt.

• 11ac Wireless Speeds to 867Mbps; to 400Mbps at ½ mile

• Optimal Bandwidth Supports Heavy Video Delivery over Long Distances

• 2 Gigabit PoE-Compliant Ports Offer Flexible Power Options for Remote IP Cameras or APs

• Focused, Narrow, Wireless Beam Reduces Interference for Long-Range Transmissions

• 360-Degree, 3-Axis Pivoting Arm Locks for Precision Alignment

BADGER PART NUMBER:
EnStationAC

ENSTATIONAC

INDUSTRIAL – OUTDOOR ACCESS POINTS/BRIDGES

Built with industrial-grade material, these APs offer weatherproof housing for harsh environments. From outdoor stadiums to RV parks and universities, these industrial-grade APs are proven to last against the elements.

ENH202

Outdoor Wireless Ethernet Bridge N300, 2.4GHz

• 11n Speeds to 300Mbps on 2.4GHz

• High 29dBm Transmit Power Extends Pt-to-Pt & Pt-to-Multipt Networks

• Focused, 10dBi Directional Antenna Beam

• Industrial-Grade, IP65-Rated Housing Withstands Harsh Environments

• PoE-Compatible 10/100 Port & Second 10/100 Port for Remote IP Cameras or APs

• Flexible Operation Modes: AP, Client Bridge/ Router or WDS Bridge

• Quickly Deploy with Mount-Ready Hardware & PoE Injector

BADGER PART NUMBER:
ENH202

ENH202

ENH220EXT

Outdoor Ruggedized Wireless Access Point, N300

• 11n Speeds to 300 Mbps on 2.4GHz

• Potent 28dBm Transmit Power Ensures Wide-Range Connectivity

• 2 Broad-Reaching, Detachable 5dBi Omni-directional Antennas

• Industrial-Grade IP68-Rated Waterproof Casing Withstands Harsh Environments

• PoE-Complaint Primary Gig-Port & Secondary Gig-Port Connect IP Cameras or APs

• Flexible Deployment Modes: AP, Client/WDS Bridge

• Quickly Deploy with Mount-Ready Hardware & PoE Injector

BADGER PART NUMBER:
ENH220EXT

ENH220EXT

EnGenius®

Fit with weatherproof housing, these affordable long-range solutions can be installed anywhere.

ENS202

Outdoor Wireless Ethernet Bridge N300, 2.4GHz

- 11n Speed to 300Mbps on 2.4GHz
- Strong 26 dBm Transmit Power Ensures Long-Range Communications
- Internal Dual-Polarity 8dBi MIMO Antenna Maximizes Wireless Connections
- IP55-Rated Waterproof Casing Withstands Harsh Climates
- Flexible Operation Modes: AP, Client Bridge/Router or WDS Bridge
- Quickly Deploy with Included Mount-Ready Hardware & PoE Injector
- PoE Extends Power to Unwired Areas; Connect Remote IP Cameras or APs vie 2nd Port

BADGER PART NUMBER:
ENS202

ENS202

ENS202EXT

Outdoor Wireless Access Point N300, 2.4GHz, Removable Antennas

- 11n Speeds to 300Mbps on 2.4GHz
- IP55-Rated Casing Withstands Harsh Environments
- Robust 26dBm Transmit Power Supports Long-Range Outdoor Connections
- 2 Omni Detachable 5dBi, MIMO Antennas Maximize Coverage
- PoE-Compatible 10/100 Port & Second 10/100 Port for Remote IP Cameras or APs
- Flexible Operation Modes: AP, Client Bridge/Router or WDS Bridge
- Deploy Quickly with Mount-Ready Hardware & PoE Injector

BADGER PART NUMBER:
ENS202EXT

ENS202EXT

ENS500

Outdoor Wireless Ethernet Bridge N300, 5GHz

- 11n Speeds to 300Mbps on 5GHz
- High 26dBm Transmit Power Enables Long-Range Outdoor Connections
- Integrated, Directional 10dBi MIMO Antennas for Extended Coverage
- IP65-Rated Waterproof Housing Withstands Harsh Climates
- PoE Extends Power to Unwired Areas; Connect Remote IP Cameras or APs vie 2nd Port
- Versatile Function Modes: AP, Client Bridge/Router or WDS Bridge
- Quickly Deploy with Included Mount-Ready Hardware & PoE Injector

BADGER PART NUMBER:
ENS550

ENS550

ENS500EXT

Outdoor Wireless Access Point N300, 5GHz, Removable Antenna

- 11n Speeds to 300Mbps on 5Ghz
- Industrial-Grade, IP65-Rated Housing Withstands Harsh Environments
- Hardy 26dBm Transmit Power Delivers Long-Range Outdoor Connectivity
- 2 Omni Detachable 5dBi MIMO Antennas Maximize Coverage
- PoE Extends Power to Unwired Areas; Connect Remote IP Cameras or APs vie 2nd Port
- Flexible Operation Modes: AP, Client Bridge/Router or WDS Bridge
- Quickly Deploy with Mount-Ready Hardware & PoE Injector

BADGER PART NUMBER:
ENS500EXT

ENS550EXT

ENS1200

Outdoor Wireless Access Point, Dual-Band AC1200

- Dual-Band 11ac Speeds to 866Mbps on 5GHz; to 300Mbps on 2.4GHz
- IP55-Rated Waterproof Housing Withstands Harsh Environments
- Robust 27dBm Transmit Power Extends Outdoor Connectivity
- Wide Reaching, Internal, 5dBi High-Gain Antennas on Both Bands
- PoE-Compliant Primary Gig-Port & Secondary Pass-Through Gig-Port Provides Added Flexibility
- Fast Roaming Secures Seamless Connections; Band Steering Optimizes Network Traffic Flow

BADGER PART NUMBER:
ENS1200

ENS1200

ENS1750

Outdoor Wireless Access Point, Dual-Band AC1750

- Dual-Band 11ac Speeds to 1300Mbps on 5GHz; to 450Mbps on 2.4GHz
- IP55-Rated Waterproof Housing Withstands Harsh Environments
- High 29dBm Transmit Power Enables Long-Range Connections
- Far-Reaching Internal, High-Gain 5dBi Antennas on Both Bands
- PoE-Compliant Primary Gig-Port & Secondary Pass-Through Gig-Port Offers Deployment Flexibility
- Fast Roaming Secures Seamless Connections; Band Steering Optimizes Network Traffic Flow

BADGER PART NUMBER:
ENS1750

ENS1750

NETWORK INFRASTRUCTURE SOLUTIONS

Every effort has been made to ensure the integrity of this catalog. Badger Communications cannot be held responsible for any misrepresentation associated with any products due to omissions, typographic errors or misprints.

NETWORK INFRASTRUCTURE SOLUTIONS

EDS6115
1-MP Wireless Day/Night Mini Dome IP Surveillance Camera
- Ultra-wide angle 1 MP CMOPS lens captures higher-resolution images over broader areas
- Removable IR cut filter & built-in IR illuminators for night viewing to 32 ft./10 m
- 802.11n Wireless speeds for flexible deployments
- PoE (802.11af) support extends power to unwired areas
- H.264 Video format provides 1280x720 HD performance utilizing less bandwidth

BADGER PART NUMBER:
EDS6115

EDS6115

EDS8012
Wireless IP Surveillance Solution, 2.4 GHz
- High-gain 13dBi antenna extends wireless connections to 5 miles point-to-point
- 802.11n Wireless speeds to 300Mbps on 2.4GHz; 90Mbps at ½ mile for streaming surveillance
- Ultra-wide angle 1MP lens captures high-res images over broader areas
- Removable IRC filter & built-in IR LED illuminators for day/night monitoring in low light or complete darkness
- 360-Degree 3-axis pivoting arm on AP locks for precise alignment, includes pole mounting kit & cable management

BADGER PART NUMBER:
EDS8012

EDS8015

EDS8015
Wireless IP Surveillance Solution, 5GHz
- High-gain 19dBi antenna extends wireless connections to 5 miles point-to-point
- 802.11n Wireless speeds to 300Mbps on 5GHz; 90Mbps at ½ mile for streaming surveillance
- Ultra-wide angle 1MP lens captures high-res images over broader areas
- Removable IRC filter & built-in IR LED illuminators for day/night monitoring in low light or complete darkness
- 360-Degree 3-axis pivoting arm on AP locks for precise alignment, includes pole mounting kit & cable management

BADGER PART NUMBER:
EDS8015

EDS8015

CONSUMER ROUTERS/EXTENDERS

ESR300H
- Long-Range
- Wireless-N Router
- Up to 300 Mbps / 2.4GHz
- Built-in 4-Port Fast Ethernet Switch
- Double Your Wireless Range!

BADGER PART NUMBER:
ESR300H

ESR300H

ERB9250
802.11b/g/n Wireless Range Extender
- Up to 300Mbps
- Unversal Repeater mode / Client Bridge mode
- WEP / WPA / WPA2
- Removable and upgradeable antennas
- Pair best with EnGenius ESR-9752, ESR-9850, and ESR9855G

BADGER PART NUMBER:
ERB9250

ERB9250

ESR350
2.4 GHz Wireless N300 IoT Gigabit Cloud Router w/USB Port
- Affordable Xtra Range 4-port wireless-N router
- Single-band with speeds up to 300Mbps on 2.4 GHz band
- Built-in 4-port Gig E Switch, 1 Gig E WAN port
- Attach storage devices via USB port and access/stream media, video, music, or monitor/manage the Cloud Router

BADGER PART NUMBER:
ESR350

ERS350

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EnGenius®

ENH500

Outdoor Wireless Ethernet Bridge N300, 5GHz

- 11n Speeds to 300Mbps on 5GHz
- Strong 28dBm Transmit Power Expands Pt-to-Pt & Pt-to-Multipt Networks
- Focused, 3dBi Directional Antenna Beam
- Industrial-Grade, IP65-Rated Casing Withstands Harsh Environments
- PoE-Compatible 10/100 Port & Second 10/100 Port for Remote IP Cameras or APs
- Flexible Operation Modes: AP, Client Bridge/ Router or WDS Bridge
- Quickly Deploy with Mount-Ready Hardware & PoE Injector

BADGER PART NUMBER:
ENH500

ENH500

ENH710EXT

Outdoor Ruggedized Wireless Access Point, Dual-Band N600

- Dual-Band 11n Speeds to 300Mbps on 5GHz; to 300Mbps on 2.4GHz
- Robust 27dBm Transmit Power Ensures Broad Connectivity
- 4 Wide-Reaching, Detachable Antennas; 5dBi on 2.4GHz & 7dBi on 5GHz
- Industrial-Grade IP68-Rated Waterproof Housing Withstands Harsh Environments
- 1 PoE-Compliant Gig-Port & 1 Standard Gig-Port for Outdoor IP Cameras or APs
- Secure Guest Network, Seamless Fast Roaming; Band Steering Optimizes Network Traffic

BADGER PART NUMBER:
ENH710EXT

ENH710EXT

ENH900EXT

Outdoor Ruggedized Wireless Access Point, Dual-Band N900, 3x3

- Dual-Band 11n Speeds to 450Mbps on 5GHz; to 450Mbps on 2.4GHz
- Strong 29dBm Transmit Power Extends Outdoor Coverage
- 6 Detachable Omni-Directional Antennas; 5dBi on 2.4GHz & 7dBi on 5GHz
- Industrial-Grade IP68-Rated Waterproof Housing Withstands Harsh Environments
- 2 PoE-Complaint Gig-Ports for Flexible Remote IP Camera or AP Power Options
- Secure Guest Network, Seamless Fast Roaming; Band Steering Optimizes Network Traffic

BADGER PART NUMBER:
ENH900EXT

ENH900EXT

ENH1750EXT

Outdoor Ruggedized Wireless Access Point, Dual-Band AC1750

- Dual-Band 11ac Speeds to 1300Mbps on 5GHz; to 450Mbps on 2.4GHz
- High 29dBm Transmit Power Ensures Long-Range Connectivity
- 6 Wide-Reaching, Detachable Antennas; 5dBi on 2.4GHz & 7dBi on 5GHz
- Industrial-Grade IP68-Rated Waterproof Housing Withstands Harsh Environments
- 2 Gigabit PoE-Compliant Ports Offer Flexible Power Options for Remote IP Cameras or APs
- Fast Roaming for Seamless Connections; Band Steering Optimizes Network Traffic

BADGER PART NUMBER:
ENH1750EXT

ENH1750EXT

POWER-OVER-ETHERNET ADAPTERS

EPA5006GAT

802.3at/af Gigabit Power-over-Ethernet Adapter

- Delivers both data & power to 802.3at/af PoE-compliant devices
- Ideal for connecting APs, IP Cameras, VoIP phones & more
- Optimal port design for easy mounting/positioning
- Compact Design; Sends up to 30W of output power
- Disconnect, short-circuit & surge protection ensures reliable secure connections

BADGER PART NUMBER:
EPA5006GAT

EPA5006GAT

EPA5006GP

Passive 54v Gigabit Power-over-Ethernet Adapter

- Passive 54v provides proprietary PoE power
- Delivers both data & power to Passive 54v PoE-compatible APs/devices
- Optimal port design for easy mounting/positioning
- Sends up to 32.8W/54v/0.6A of output power
- Disconnect, short-circuit & surge protection ensures reliable secure connections

BADGER PART NUMBER:
EPA5006GP

EPA5006GP

NETWORK INFRASTRUCTURE SOLUTIONS

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ESR600

Dual Band 2.4/5 GHz Wireless N600 IOT Gigabit Cloud Router with USB Port

- Up to 600 Mbps wireless speed with both 2.4 and 5 GHz frequency bands
- Gigabit wired speeds and USB port
- The EnGenius Cloud and EnShare™
- Xtra Range™ technology for better signal coverage
- Prioritizes applications and maintains quality of experience
- Multiple SSIDs – industry-standard security

BADGER PART NUMBER:
ESR600

ERS600

EPG600

Intelligent Phone Gateway

- 2 RJ11 ports to connect a small business or home's PSTN phone line
- Built-in 4-port gigabit switch to connect a multitude of devices
- Up to 300 Mbps wireless speed on each frequency bands
- Gigabit WAN port for faster uploads and downloads
- 2 guest access logins, 1 per frequency band
- WPA / WPA2 encryption
- Free apps for iPhone®, iPad®, and Android™ devices

BADGER PART NUMBER:
EPG600

EPG600

EPG5000

Dual Band IOT Intelligent Cloud Gateway

- Built-in USB port to share media content from an attached USB hard drive to mobile devices with EnShare
- Connect with others around the globe via the internet with EnTalkLite
- Built-in 4-port gigabit switch
- Supports IEEE802.11 a/b/g/n wireless standards

BADGER PART NUMBER:
EPG5000

EPG5000

EUB1200AC

Dual Band Wireless AC1200 USB Adapter

- Wireless AC speed
- USB 3.0 speed
- Works on PCs and Macs
- Industry-standard security
- WPS button for quick wireless security setup

BADGER PART NUMBER:
EUB1200AC

EUB1200AC

NETWORK INFRASTRUCTURE SOLUTIONS

KGD-802

Industrial 8-Port Gigabit Ethernet Switches with 2 SFP Slots

The KGD-802 is an industrial managed Gigabit Ethernet switch which is featured with the following switched ports:

Six 10/100/1000Mbps Gigabit copper ports

Two combo ports - 10/100/1000Mbps copper & 1000Base-X SFP

• Industrial Gigabit Ethernet switch (No PoE support, No transceiver installed)
• 8 10/100/1000Mbps RJ-45 and two Mini-GBIC SFP slots
• In-band web and SNMP management interfaces
• 802.1Q Tagged VLAN • QoS WFQ support
• LACP link aggregation • 802.1X access control
• 802.1w RSTP, STP, MSTP • DHCP client • SFP DDM support
• 802.3af PoE • Port mirroring

KGD-802

KGD-802

SFP GBIC

BADGER PART NUMBER:	Description
KGD-802	Industrial Gigabit Ethernet Switch (No PoE support, No transceiver installed)
KGD-802-P	Industrial Gigabit Ethernet Switch with PoE support (No transceiver installed)
1 Gig SFP+ Module Options	
SFP-GLS-10-A	1000Mbps LC, SM 10km, SFP Fiber transceiver
SFP-GLS-30-A	1000Mbps LC, SM 30km, SFP Fiber transceiver
SFP-GLS-50-A	1000Mbps LC, SM 50km, SFP Fiber transceiver
SFP-GLS-W3520-A	1000Mbps BiDi LC, type 1, SM 20km, SFP Fiber WDM transceiver
SFP-GLS-W5320-A	1000Mbps BiDi LC, type 2, SM 20km, SFP Fiber WDM transceiver
SFP-GLSD-10-A	1000Mbps LC, SM 10km, SFP Fiber transceiver with DDM

KGD-600

Industrial Managed 6-Port Gigabit Ethernet Switch with 1 mini-GBIC Port

The KGD-600 is a managed 6-port Gigabit Ethernet switch which is featured with five copper ports, one mini-GBIC (SFP) port and the following advantages in a small footprint box

• 5 10/100/1000Mbps Gigabit Ethernet ports and 1 mini-GBIC port
• In-band web-based management interface • Panel/DIN-Rail/Wall mountable
• Wide operating temperature range • In-band management
• Optional Fiber connectivity • 802.1Q Tagged VLAN support
• QoS WFQ support • 802.1X authentication

KGD-600

KGD-600

SFP GBIC

BADGER PART NUMBER:	Description
KGD-600-SX	1 LC Port, MMF – Up to 500 M
KGD-600-LX	1 LC Port, MMF – Up to 550 M, SMF – Up to 10 KM
KGD-600-LX20	1 LC Port, SMF, Up to 20 KM
1 Gig SFP+ Module Options	
SFP-GLS-10-A	1000Mbps LC, SM 10km, SFP Fiber transceiver
SFP-GLS-30-A	1000Mbps LC, SM 30km, SFP Fiber transceiver
SFP-GLS-50-A	1000Mbps LC, SM 50km, SFP Fiber transceiver
SFP-GLS-W3520-A	1000Mbps BiDi LC, type 1, SM 20km, SFP Fiber WDM transceiver
SFP-GLS-W5320-A	1000Mbps BiDi LC, type 2, SM 20km, SFP Fiber WDM transceiver
SFP-GLSD-10-A	1000Mbps LC, SM 10km, SFP Fiber transceiver with DDM

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KTI NETWORKS

KSD-800

Industrial 8-Port Fast Ethernet Switches with Fiber Connectivity

KSD-800 is a 8-port switch designed with the capability of taking wider range of power input and environmental temperature. In addition to the 8 10/100Mbps ports for client groups, it has an 100Mbps Fiber port for remote network connection. With many unique characteristics, KSD-800 is the ideal solution for environment critical project where stability is at the #1 priority

- 8 UTP 10/100Base-TX Fast Ethernet Ports
- Mix 10Base-T, 100Base-TX and Fiber
- External Power Supply • Non-Rack-Mount
- Specify Optional Fiber Ports from Models shown to the right

KSD-800

KSD-800

KSD-800M

BADGER PART NUMBER:	Description
KSD-800-1T	FX8, ST/MMF, up to 2 KM
KSD-800-1C	FX8, SC/MMF, up to 2 KM
KSD-800-1SL2	FX8, SC/SMF, up to 20 KM
KSD-800-2T	FX7, ST/MMF, up to 2 KM; FX8, ST/MMF, up to 2 KM
KSD-800-2C	FX7, SC/MMF, up to 2 KM; FX8, SC/MMF, up to 2 KM
KSD-800-2C1	FX7, SC/MMF, up to 2 KM; FX8, SC/SMF, up to 20 KM
KSD-800-2SL2	FX7, SC/SMF, up to 20 KM; FX8, SC/SMF, up to 20 KM
KSD-800-C1SL2	FX7, SC/MMF, up to 2 KM; FX8, SC/SMF, up to 20 KM
KSD-800M-1T	Managed FX8, ST/MMF, up to 2 KM
KSD-800M-1C	Managed FX8, SC/MMF, up to 2 KM
KSD-800M-1SL2	Managed FX8, SC/SMF, up to 20 KM
KSD-800M-2T	Managed FX7, ST/MMF, up to 2 KM; FX8, ST/MMF, up to 2 KM
KSD-800M-2C	Managed FX7, SC/MMF, up to 2 KM; FX8, SC/MMF, up to 2 KM
KSD-800M-2C1	Managed FX7, SC/MMF, up to 2 KM; FX8, SC/SMF, up to 20 KM
KSD-800M-2SL2	Managed FX7, SC/SMF, up to 20 KM; FX8, SC/SMF, up to 20 KM
KSD-800-C1SL2	Managed FX7, SC/MMF, up to 2 KM; FX8, SC/SMF, up to 20 KM

KSD-541

Industrial 5-Port Fast Ethernet Switch with SFP Slot

The switches are 5-port Fast Ethernet switches which are featured with four copper ports and one combo port. The combo port comes with one RJ-45 and one SFP slot. The SFP slot can be mounted with a fiber transceiver optionally to support a fiber connection.

- 5 10/100 Mbps RJ-45 and one 100 Mbps SFP slot
- All copper ports support auto-negotiation and auto-MDI/MDI-X detection
- Provides full wire speed forwarding
- Supports 802.3x flow control for full-duplex and backpressure for half-duplex
- SFP for optional optical fiber connection
- Two types of power supply interfaces - Jack and terminal block
- Stand-alone, wall, Din-Rail, and panel mounting
- Industrial-rated emission and immunity performance

KSD-541

KSD-541

SFP GBIC

BADGER PART NUMBER:	Description
KSD-541	Industrial Fast Ethernet switch (No PoE support, No transceiver installed)
KSD-541-P	Industrial Fast Ethernet switch with PoE support (No transceiver installed)
1 Gig SFP+ Module Options	
SFP-GLS-10-A	1000Mbps LC, SM 10km, SFP Fiber transceiver
SFP-GLS-30-A	1000Mbps LC, SM 30km, SFP Fiber transceiver
SFP-GLS-50-A	1000Mbps LC, SM 50km, SFP Fiber transceiver
SFP-GLS-W3520-A	1000Mbps BiDi LC, type 1, SM 20km, SFP Fiber WDM transceiver
SFP-GLS-W5320-A	1000Mbps BiDi LC, type 2, SM 20km, SFP Fiber WDM transceiver
SFP-GLSD-10-A	1000Mbps LC, SM 10km, SFP Fiber transceiver with DDM

NETWORK INFRASTRUCTURE SOLUTIONS

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CRITICAL ENVIRONMENT NETWORKING SOLUTIONS

KSD-103-A/KSD-103-B

Industrial 3-Port Fast Ethernet Media Converter Switches

The industrial rated KSD-103 Fast Ethernet switch series supports three switching-base segment communications and benefit the following applications and make fiber deployment easier:

- Copper to fiber bridging converter
- Multimode fiber to single mode fiber bridging converter
- Fiber cable extender • Cascaded fiber networking
- Provide 3 switching-base network segments
- Auto MDI/MDI-X crossover function on the TP copper port
- Support IEEE 802.3x flow control for full-duplex operation
- Support Back-pressure flow control for half-duplex operation

KSD-103-A

KSD-103-B

KSD-103-A

KSD-103-B

BADGER PART NUMBER:	Description
KSD-103-A-T	FX ST Port, MMF, 2 KM
KSD-103-A-C	FX SC Port, MMF, 2 KM
KSD-103-A-C1	FX SC Port, MMF, 20 KM
KSD-103-A-SL2	FX SC Port, SMF, 20 KM
KSD-103-A-SL3	FX SC Port, SMF, 30 KM
KSD-103-A-SL4	FX SC Port, SMF, 40 KM
KSD-103-A-SL6	FX SC Port, SMF, 60 KM
KSD-103-A-W3515	Bi-Di SC Port, SMF, 15-20 KM
KSD-103-A-W5315	Bi-Di SC Port, SMF, 15-20 KM
KSD-103-B-T	FX ST Port, MMF, 2 KM
KSD-103-B-C	FX SC Port, MMF, 2 KM
KSD-103-B-C1	FX SC Port, MMF, 20 KM
KSD-103-B-SL2	FX SC Port, SMF, 20 KM
KSD-103-B-SL3	FX SC Port, SMF, 30 KM
KSD-103-B-SL4	FX SC Port, SMF, 40 KM
KSD-103-B-SL6	FX SC Port, SMF, 60 KM
KSD-103-B-W3515	Bi-Di SC Port, SMF, 15-20 KM
KSD-103-B-W5315	Bi-Di SC Port, SMF, 15-20 KM
KSD-103-B-C1SL2	FX1, SC/MMF, 2 KM; FX2, SC/SMF, 20 KM

KFS-0540, KFS-0840

Industrial 5/8-Port Fast Ethernet Switches

The switch provides 5/8 10/100Mbps copper ports for connections to Ethernet and Fast Ethernet devices. With the featured auto-negotiation function, the switch can detect and configure the connection speed and duplex automatically. The switch also provides auto MDI/MDI-X function, which can detect the connected cable and switch the transmission wire pair and receiving pair automatically. This auto-crossover function can simplify the type of network cables used.

- Auto MDI/MDI-X crossover function on the TP copper port
- Support IEEE 802.3x flow control for full-duplex operation
- Support Back-pressure flow control for half-duplex operation
- Wide operating temperature range for temperature critical environment
- Support DIN-Rail mounting and panel mounting
- Provide two power input types to meet more application needs
- Accept wide power input voltage range for application flexibility
- Industrial-rated Emission and Immunity performance

KFS-0540

KFS-0840

KFS-0540

KFS-0840

BADGER PART NUMBER:	Description
KFS-0540	5 10/100 Fast Ethernet copper ports
KFS-0840	8 10/100 Fast Ethernet copper ports
KPW-2012-D-E	DIN-Rail Power Supply, Input 100 ~ 240VAC, Output 12VDC/1A 20Watts
KCD-4PB	Panel mounting kit

KPW-2012-D-E

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KFS-1640

Industrial 16-Port L2 Fast Ethernet Switches

- Auto MDI/MDI-X crossover function on the TP copper port • Support IEEE 802.3x flow control for full-duplex operation
- Support Back-pressure flow control for half-duplex operation
- Transparent forwarding for tagged/untagged, IGMP, RSTP/STP packets with no modification
- IEEE 802.3az Energy Efficient Ethernet (EEE) • Support DIN-Rail mounting and panel mounting
- Wide operating temperature range for temperature critical environment
- Provide two power input types to meet more application needs
- DC power input options: +4.5 ~ +50VDC, 110VDC, 90 ~ 240VAC
- Accept wide power input voltage range for application flexibility
- Industrial-rated Emission and Immunity performance

KFS-1640

KFS-1640-L

BADGER PART NUMBER:	Description
KFS-1640-L	DC IN Voltage: +4.5 ~ +50VDC
KFS-1640-H	DC IN Voltage: +110VDC 90 ~ 240VAC

KFS-2621

Web Smart 24-Port 10/100 Fast Ethernet Switches with 2 Gigabit Combo Ports

- 24 FE 10/100 ports • 2 GbE combo ports • 2 GbE SFP for fiber
- Web managed • 802.1Q VLAN and QoS • Port bandwidth control
- STP / RSTP support • LACP trunking • IGMP snooping • DC power option

KFS-2621

KFS-2621-S

SFP GBIC

BADGER PART NUMBER:	Description
KFS-2621-S	Web Smart 24-Port 10/100 Fast Ethernet Switch with AC power
KFS-2621-D	Web Smart 24-Port 10/100 Fast Ethernet Switch with DC power
1 Gig SFP+ Module Options	
SFP-GLS-10-A	1000Mbps LC, SM 10km, SFP Fiber transceiver
SFP-GLS-30-A	1000Mbps LC, SM 30km, SFP Fiber transceiver
SFP-GLS-50-A	1000Mbps LC, SM 50km, SFP Fiber transceiver
SFP-GLS-W3520-A	1000Mbps BiDi LC, type 1, SM 20km, SFP Fiber WDM transceiver
SFP-GLS-W5320-A	1000Mbps BiDi LC, type 2, SM 20km, SFP Fiber WDM transceiver
SFP-GLSD-10-A	1000Mbps LC, SM 10km, SFP Fiber transceiver with DDM

KCD-400

Industrial 1000Base-T to 1000Base-X Gigabit Media Converters

The industrial KCD-400 media converter series provides industrial strength Gigabit Ethernet copper-to fiber media conversion,allowing for 1000Base-T-to-1000Base-Xover multi-mode or optional singlemode fiber optical media. With the SFP (Mini-GBIC) connector design,the media converter not only supports existing variety of multimode and single mode fibers,but also preserves the flexibility to adapt to any change of your fiber network in the future.

- Plug and play design with no configuration setting
- Wide operating temperature range for temperature critical environment
- Support DIN-Rail Mounting and panel mounting • Industrial-rated Emission and Immunity performance
- Provide two power input types to meet more application needs
- Accept wide power input voltage range for application flexibility

KCD-400

KCD-400

SFP GBIC

BADGER PART NUMBER:	Description
KCD-400-SX	LC, MMF, 220 M - 500 M
KCD-400-LX	LC, MMF, 550 M; SMF, 10 KM
KCD-400-LX20	LC, SMF, 20 KM
KCD-400-LX110	LC, SMF, 110 KM
1 Gig SFP+ Module Options	
SFP-GLS-10-A	1000Mbps LC, SM 10km, SFP Fiber transceiver
SFP-GLS-30-A	1000Mbps LC, SM 30km, SFP Fiber transceiver
SFP-GLS-50-A	1000Mbps LC, SM 50km, SFP Fiber transceiver
SFP-GLS-W3520-A	1000Mbps BiDi LC, type 1, SM 20km, SFP Fiber WDM transceiver
SFP-GLS-W5320-A	1000Mbps BiDi LC, type 2, SM 20km, SFP Fiber WDM transceiver
SFP-GLSD-10-A	1000Mbps LC, SM 10km, SFP Fiber transceiver with DDM

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NETWORK INFRASTRUCTURE SOLUTIONS

CRITICAL ENVIRONMENT NETWORKING SOLUTIONS

KCD-300

Industrial 10/100Base-TX to 100Base-FX Media Converters
- Provides Industrial-strength Ethernet copper-to-fiber media conversion
- Allows for 10Base-T-100Base-FX or 100Base-FX or 100Base-TX-100Base-FX over multi-mode or optional single-mode
- Supports DIN-Rail and panel-mounting • 2 Power input types to meet app. needs
- Industrial-rated Emission and performance • Low Power consumption
- 2 Power interfaces: Screw Terminal and DC Jack

KCD-300

BADGER PART NUMBER:	Description
KCD-300-T	ST, MIFF, 2 KM
KCD-300-C	SC, MIFF, 2 KM
KCD-300-C1	SC, MIFF, 2 KM
KCD-300-SL2	SC, SMF, 20 KM
KCD-300-SL3	SC, SMF, 30 KM
KCD-300-SL4	SC, SMF, 40 KM
KCD-300-SL6	SC, SMF, 60 KM
KCD-300-SL8	SC, SMF, 80 KM
KCD-300-SL10	SC, SMF, 100 KM

BADGER PART NUMBER	Description
KCD-300-SL12	SC, SMF, 120 KM
KCD-300-W3515	Bi-Di SC, SMF, 15-20 KM
KCD-300-W5315	Bi-Di SC, SMF, 15-20 KM
KCD-300-W3540	Bi-Di SC, SMF, 40 KM
KCD-300-W5340	Bi-Di SC, SMF, 40 KM
KCD-300-EC1	SC, MIFF, 2 KM
KCD-300-EW3515	Bi-Di SC, SMF, 15-20 KM
KCD-300-EW5315	Bi-Di SC, SMF, 15-20 KM

KCD-302

Industrial Tri-segment Media Converter
- Provides 3 switching-base network segments - 1 TP copper, 2 Fiber
- Full wire speed forwarding between any 2 of 3 segments
- Auto-negotiation 10/100Mbps or forced mode on TP copper port
- Auto MDI/MDI-X crossover function on the TP copper port
- IEEE 802.3x flow control for full-duplex operation • Back-pressure flow control for half-duplex operation
- Low power consumption • Two power interface types: screw terminal and DC Jack

KCD-302

KCD-302

BADGER PART NUMBER:	Description
KCD-302-2T	FX1, ST/MMF, up to 2 KM; FX2, ST/MMF, up to 2 KM
KCD-302-2C	FX1, SC/MMF, up to 2 KM; FX2, SC/MMF, up to 2 KM
KCD-302-2C1	FX1, SC/MMF, up to 2 KM; FX2, SC/MMF, up to 2 KM
KCD-302-2SL2	FX1, SC/SMF, up to 20 KM; FX2, SC/SMF, up to 20 KM
KCD-302-2SL3	FX1, SC/SMF, up to 30 KM; FX2, SC/SMF, up to 30 KM
KCD-302-2SL4	FX1, SC/SMF, up to 40 KM; FX2, SC/SMF, up to 40 KM
KCD-302-2SL6	FX1, SC/SMF, up to 60 KM; FX2, SC/SMF, up to 60 KM
KCD-302-C1SL2	FX1, SC/MMF, up to 2 KM; FX2, SC/SMF, up to 20 KM
KCD-302-2W3515	Bi-Di SC, SMF, 15-20 KM
KCD-302-2W5315	Bi-Di SC, SMF, 15-20 KM

KFC-241

Industrial Compact 10/100BASE-TX to 100BASE-FX Media Converters
- Support full wire speed conversion for 10/100Mbps speed and media types • Auto-negotiation
- Auto-crossover • Link Fault Pass Through • Transparent conversion to 802.1Q VLAN tagged packets
- Far End Fault support • Smallest latency • Wide range of DC IN voltage • Low power consumption
- DC 110V support • Supports DIN rail mounting and optional screwed plane mounting
- Compact and robust • Supports wide operating temperature range • Industrial-rated

KFC-241-L

KFC-241-H

BADGER PART NUMBER:	Description
KFC-241-L-T	Duplex ST, Multimode Fiber, 2 KM, TB-3P, DC Jack
KFC-241-H-T	Duplex ST, Multimode Fiber, 2 KM, TB-3P
KFC-241-L-C	Duplex SC, Multimode Fiber, 2 KM, TB-3P, DC Jack
KFC-241-H-C	Duplex SC, Multimode Fiber, 2 KM, TB-3P
KFC-241-L-SL2	Duplex SC, Single mode Fiber, 20 KM, TB-3P, DC Jack
KFC-241-H-SL2	Duplex SC, Single mode Fiber, 20 KM, TB-3P
KFC-241-L-SL3	Duplex SC, Single mode Fiber, 30 KM, TB-3P, DC Jack
KFC-241-H-SL3	Duplex SC, Single mode Fiber, 30 KM, TB-3P
KFC-241-L-SL6	Duplex SC, Single mode Fiber, 60 KM, TB-3P, DC Jack
KFC-241-H-SL6	Duplex SC, Single mode Fiber, 60 KM, TB-3P
KFC-241-H-W3520	Bi-Di SC, Single mode Fiber, 20 KM, TB-3P, DC Jack
KFC-241-H-W5320	Bi-Di SC, Single mode Fiber, 20 KM, TB-3P

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KSC-200

Industrial Optically Isolated Serial RS-232 to Fiber Converter

The converter is designed to provide the most versatile connection possible between two RS-232 serial equipment using fiber optic cable. It allows any two pieces of serial equipment to communicate full-duplex over typical duplex fibers,or over optional single fiber up to 20km. The converter supports transparent conversion for not only RS-232 data lines, but also all RS-232 control signals. It also supports all RS-232 baud rates with no need for user configuration. The Din-rail mountable design makes it ideal for industrial cabinets and enclosures

- Transparent conversion for all RS-232 signals
- Surge protection • Optical isolation • High ESD protection
- Versatile optical cables support • DIN-Rail mounting
- Wide temperature range • Wide power voltage range

KSC-200

BADGER PART NUMBER:	Description
KSC-200-T	Duplex ST, MMF, 2 KM
KSC-200-C	Duplex SC, MMF, 2 KM
KSC-200-SL2	Duplex SC, SMF, 20 KM
KSC-200-SL4	Duplex SC, SMF, 40 KM
KSC-200-SL6	Duplex SC, SMF, 60 KM
KSC-200-W3515	Bi-Di SC, SMF, 15-20 KM
KSC-200-W5315	Bi-Di SC, SMF, 15-20 KM

KSC-200

KSC-240

Industrial Optically Isolated RS-232 to RS-485/422 Converter

The industrial converter is designed to convert RS-232 signals to optically isolated, balanced, full or half-duplex RS-422 or RS-485 signals at baud rate up to 115.2Kbps. It features remote RTS control design, which allows software to control RS-485 transmission. With smart ADCTM (Auto Data Control) design, the converter can uses send data signal to control RS-485 transmission automatically so no software control is required in RS-485 mode. The Din-rail mountable design makes it ideal for industrial cabinets and enclosures. Further, more designs such as signal protection, wide operating temperature range, wide power voltage range are provided to suit for more industrial applications.

- Supports RS-232 baud rate up to 115.2 Kbps • Operation with no required configuration
- Surge protection • ESD protection • Optical isolation • RTS control for RS-485 • ADC design for RS-485
- DIN-Rail mounting • Wide temperature range • Wide power voltage range

BADGER PART NUMBER:

KSC-240

KSC-240

KGS-0820

Managed 8-Port Gigabit Ethernet Switches with 2 SFP Slots and PoE options

The KGS-0820 is a managed Gigabit Ethernet switch which is featured with the following switched ports and advantages in a small footprint box:

  – Six 10/100/1000Mbps Gigabit copper ports
  – One combo port - 10/100/1000Mbps copper & 100Base-X SFP
  – One combo port - 10/100/1000Mbps copper & 1000Base-X SFP

- 802.1Q Tagged VLAN • QoS WFQ support
- LACP link aggregation • 802.1x access control
- 802.1w RSTP, STP, MSTP • DHCP client • Two speed SFP support
- SFP DDM support • Port mirroring • PoE PSE option
- DC power input option

KGS-0820

BADGER PART NUMBER:	Description
KGS-0820-P	Managed, PoE, AC power
KGS-0820-D	Managed, PoE, DC power
KGS-0820-S	Managed, AC power
KGS-0820-L	AC power
KGS-0820-LP	PoE, C power

KGS-0820

NETWORK INFRASTRUCTURE SOLUTIONS

Every effort has been made to ensure the integrity of this catalog. Badger Communications cannot be held responsible for any misrepresentation associated with any products due to omissions, typographic errors or misprints.

CRITICAL ENVIRONMENT NETWORKING SOLUTIONS

KGD-802-P

Industrial 8-Port Gigabit Ethernet Switches with 2 SFP Slots and 4 PoE PSE Ports

• Industrial Gigabit Ethernet switch with PoE support (No transceiver installed)
• 8 10/100/1000Mbps RJ-45 and two Mini-GBIC SFP slots
• In-band web and SNMP management interfaces
• 802.1Q Tagged VLAN • QoS WFQ support • LACP link aggregation
• 802.1x access control • 802.1w RSTP, STP, MSTP • DHCP client
• SFP DDM support • 802.3af PoE • Port mirroring

KGD-802-P

KGD-802-P

SFP GBIC

BADGER PART NUMBER:	Description
KGD-802-P	Industrial Gigabit Ethernet Switch with PoE support (No transceiver installed)
1 Gig SFP+ Module Options	
SFP-GLS-10-A	1000Mbps LC, SM 10km, SFP Fiber transceiver
SFP-GLS-30-A	1000Mbps LC, SM 30km, SFP Fiber transceiver
SFP-GLS-50-A	1000Mbps LC, SM 50km, SFP Fiber transceiver
SFP-GLS-W3520-A	1000Mbps BiDi LC, type 1, SM 20km, SFP Fiber WDM transceiver
SFP-GLS-W5320-A	1000Mbps BiDi LC, type 2, SM 20km, SFP Fiber WDM transceiver
SFP-GLSD-10-A	1000Mbps LC, SM 10km, SFP Fiber transceiver with DDM

KS-1080

Managed 8-Port 10/100 Fast Ethernet Switch with PoE Function and Fiber Connectivity

• 6 10/100 Mbps ports support auto-negotiation and auto-MDI/MDI-X configuration
• 4 10/100 Mbps ports provide PoE PSE functions
• 4 PoE PSE 10/100 Mbps ports • 2 typical 10/100 Mbps ports
• 2 100FX port slots • SNMP/Web/Telnet management
• Port-based, 802.1Q VLAN
• Port, 802.1p, DSCP, IP network based QoS

KS-1080

KS-1080

BADGER PART NUMBER:	Description
KS-1080-FMT	ST, MMF, 2 KM
KS-1080-FMC	SC, MMF, 2 KM
KS-1080-FJM	MT-RJ, MMF, 2 KM
KS-1080-FSA2	SC, SMF, 20 KM
KS-1080-FSL2	SC, MMF, 20 KM

KSD-541-P

Industrial 5-Port Fast Ethernet Switch with SFP Slot and 4 PoE PSE Ports

• 5 10/100 Mbps RJ-45 and one 100 Mbps SFP slot
• All copper ports support auto-negotiation and auto-MDI/MDI-X detection
• Provides full wire speed forwarding
• Supports 802.3x flow control for full-duplex and backpressure for half-duplex
• Provides SFP for optional optical fiber connection
• Provides four 802.3af-compliant PoE-enabled PSE ports
• Two types of power supply interfaces - Jack and terminal block
• Stand-alone, Wall, Din-Rail, and Panel mounting
• Industrial-rated emission and immunity performance

KSD-541-P

KSD-541

BADGER PART NUMBER:	Description
KSD-541-P	Industrial Fast Ethernet switch with PoE support (No transceiver installed)

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KC-351

PoE Powered 10/100Base-TX to 100Base-FX Media Converters

- Full wire speed performance
- Comprehensive configuration options
- Best Conversion Latency • Remote Loop Back Test
- Remote TP Link Monitoring • Optional DIN-Rail Mounting
- Powered by PoE, AC Adapter, USB
- Options for Bi-Di Communication
- Options for CWDM

KC-351

KC-351

BADGER PART NUMBER:	Description
KC-351-T	Dual ST Port, Multi-Mode, 2 KM, Remote TP link monitoring
KC-351-C	Dual SC Port, Multi-Mode, 2 KM, Remote TP link monitoring
KC-351-SL2	Dual SC Port, Single-Mode, 20 KM, Remote TP link monitoring
KC-351-SL3	Dual SC Port, Single-Mode, 30 KM, Remote TP link monitoring
KC-351-SL4	Dual SC Port, Single-Mode, 40 KM, Remote TP link monitoring
KC-351-SL6	Dual SC Port, Single-Mode, 60 KM, Remote TP link monitoring
KC-351-SL8	Dual SC Port, Single-Mode, 80 KM, Remote TP link monitoring
KC-351-SL10	Dual SC Port, Single-Mode, 100 KM, Remote TP link monitoring
KC-351-SL12	Dual SC Port, Single-Mode, 120 KM, Remote TP link monitoring
KC-351-W3515	Bi-Di SC Port, Single-Mode, 15-20 KM, Remote TP link monitoring
KC-351-W5315	Bi-Di SC Port, Single-Mode, 15-20 KM, Remote TP link monitoring
KC-351-CxxW40	CWDM SC Port, Single-Mode, 40 KM, Remote TP link monitoring
KS-1080	PoE PSE switch
KPOE-100	PoE PSE mid-span injector
KC-3DR	Optional Din-Rail bracket

KPOE-100

IIEEE 802.3af PSE Mid-span Injector

The KPOE-100 is a device designed as a mid-span Power over Ethernet PSE, which is equipped with one-input and one-output RJ-45 connectors to connect directly to an Ethernet cable. It delivers power together with the Ethernet data lines over the Cat.5 cable to a PoE Powered Device such as a Wireless Access Point or a media converter located at place where no commercial outlet is available.

- IEEE802.3 af standard-compliant • Supports both Fast Ethernet and Gigabit Ethernet
- Delivers power output up to 15.4 W • Compliant PD discovery & classification
- Power shutdown protection for incompliant PD • Power shutdown protection for disconnection
- Power shutdown protection for overload, over-current and short circuit
- Plug-and-play with no configuration • Supports screw-mounting

KPOE-100

KPOE-800

Modular 8-Port Midspan Power over Ethernet Injector

The Power over Ethernet (PoE) injector is a mid-span power injector designed and tested for use with all IEEE802.3af compatible PoE Powered Devices (PDs). The PoE injector sits between a switch port and the PoE powered device, providing inline power capability to an un-powered switch port

- 8 connections support • Full IEEE 802.3af compliance
- Gigabit Ethernet support • Transparent to switch functionality
- Standard user safety protection • Modular PoE power upgradability
- 19" rack mountable

KPOE-800

KPOE-800-2P

BADGER PART NUMBER:	Description
KPOE-800-1P	PoE injector with one pre-installed 60W power module
KPOE-800-2P	PoE injector with two pre-installed 60W power modules
KPOE-800P60W	Optional PoE 60W power module
KPOE-800-BRACKET1	19" rack mounting bracket kit for 1 unit mounting
KPOE-800-BRACKET2	19" rack mounting bracket kit for 2 unit mounting

NETWORK INFRASTRUCTURE SOLUTIONS

POWER OVER ETHERNET NETWORKING SOLUTIONS

KGC-352

PoE Powered 1000Base-T to 1000Base-X Gigabit Media Converters

The Gigabit media converter is designed to convert 1000Base-T signals to/from 1000Base-X fiber signals. It is used to extend the connection distance between two Gigabit Ethernet devices via fiber cable transparently with no performance degradation. With the SFP (Mini-GBIC) connector design, the media converter not only supports existing variety of multimode and single mode fibers, but also preserves the flexibility to adapt to any change of your fiber network in the future. It also supports center chassis installation with optional power redundancy and management features when a larger fiber network is required. With pre-configured fiber transceivers, the converter also can support Bi-Di WDM and CWDM fiber network applications.

- Full wire speed performance • SFP flexibility • Best Conversion Latency
- Lower power consumption • Optional DIN-Rail Mounting • Powered by PoE, AC Adapter, USB
- Options for Bi-Di Communication • Options for CWDM

KGC-352

KGC-352

BADGER PART NUMBER:	Description
KGC-352-SX	LC, MMF, 500 M
KGC-352-LX	LC, MMF, 550 M; SMF, 10 KM
KGC-352-LX20	LC, SMF, Up to 20 KM
KGC-352-LX30	LC, SMF, Up to 30 KM
KGC-352-LX50	LC, SMF, Up to 50 KM
KGC-352-LX70	LC, SMF, Up to 70 KM
KGC-352-W3510	Bi-Di LC, SMF, Up to 10 KM
KGC-352-W5310	Bi-Di LC, SMF, Up to 10 KM
KGC-352-W3520	Bi-Di LC, SMF, Up to 20 KM
KGC-352-W5320	Bi-Di LC, SMF, Up to 20 KM
KGC-352-W3540	Bi-Di LC, SMF, Up to 40 KM
KGC-352-W5340	Bi-Di LC, SMF, Up to 40 KM
KGC-352-W3410	Bi-Di SC, SMF, Up to 10 KM
KGC-352-W4310	Bi-Di SC, SMF, Up to 10 KM
KGC-352-W3410S	Bi-Di SC, SMF, Up to 10 KM
KGC-352-W4310S	Bi-Di SC, SMF, Up to 10 KM
KC-3DR	Optional Din-Rail bracket
KS-1080	PoE PSE switch
KPOE-100	PoE PSE mid-span injector

MISCELLANEOUS NETWORKING PRODUCTS

KCD-303P-A/ KCD-303P-B

PoE Powered 1000Base-T to 1000Base-X Gigabit Media Converters

The industrial rated KCD-303P series supports three switched connections including copper and fiber for networks over POF (Plastic Optical Fiber). The copper ports support 10/100Mbps auto-negotiation and auto-MDI/MDIX for Cat.5 plug-and-play. The fiber ports support plug-less connections of high bandwidth 100Mbps data rate over POF cables. POF technology offers a complementary solution to UTP copper wire for industrial, office and home networks because it is low cost, weight little, thin, easy and safe to install and electronic noise immunity.

- Supports 3 switching-base network segments – 2 x Copper, 1 x Fiber
- Auto MDI/MDI-X crossover function on the UTP copper port
- Supports IEEE 802.3x flow control for full-duplex operation
- Supports Back-pressure flow control for half-duplex operation
- Wide operating temperature range for temperature critical environment
- Support wall mounting and panel mounting
- Industrial-rated Emission and Immunity performance

KCD-303P-A

KCD-303P-A

BADGER PART NUMBER:	Description
KCD-303P-A1	2 UTP Ports, 1 POF Ports, 1.5 mm POF Cable
KCD-303P-A2	2 UTP Ports, 1 POF Ports, 2.2 mm POF Cable
KCD-303P-B1	1 UTP Ports, 2 POF Ports, 1.5 mm POF Cable
KCD-303P-B2	1 UTP Ports, 2 POF Ports, 2.2 mm POF Cable

KCD-303P-B

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KGS-2422

Managed 24-Port Modular L2 Gigabit Ethernet Switch with 100BASE-FX Support

The 24-port Managed Gigabit Ethernet Switches are standard L2 switches that meets all IEEE 802.3/u/x/z Gigabit, Fast Ethernet specifications. The switches provide three 8-port modular slots. Each slot can accommodate one 8-port module. A variety of modules is available for selection. They include 10/100/1000M copper module, 100/1000M SFP module, Copper and SFP mixed modules, and Fast Ethernet fiber modules. Different modules can be installed flexibly in one device rack. The system detects the types of the installed modules and configures the modules automatically. With variety of modules and flexibility of installation, the switches can meet most requirements of deployment of fiber networks no matter they are Gigabit Ethernet base, Fast Ethernet base or even combination of both.

Product Highlights:
- 24-Port Managed Gigabit switch • Three 8-Port Module slots • 10/100/1000M copper connectivity
- 1000M fiber connectivity • 100M fiber connectivity • 100/1000M support on SFP port
- Web/CLI/SNMP/SSH/HTTPS support • 802.1Q Tagged VLAN • Comprehensive QoS • RSTP support
- 802.1X Access control • ACL configuration • IGMP snooping • Enhanced security features

Key Features:
- Fully modular design with three 8-port module slots supporting Gigabit and Fast Ethernet
- A variety of optional modules is available for selection including Gigabit copper, Gigabit fiber, Gigabit mix of copper and fiber, and Fast Ethernet fiber
- The copper ports support 10/100/1000Mbps auto-negotiation and auto-MDI/MDI-X detection.
- The SFP port can support both 100Mbps fiber transceivers and Gigabit Ethernet SFP fiber transceivers
- Support connectivity for Fast Ethernet fiber, 100BASE-FX with SC/ST/BiDi/VF-45 transceivers
- Flexible installation with any combination of different modules in one rack • Provides Gigabit full wire speed forwarding
- Supports power saving mode when port link down or different RJ-45 cable length.
- Supports 802.3x flow control for full-duplex and backpressure for half-duplex
- Supports console and in-band Web/Telnet/SSH/HTTPS/SNMP interfaces for switch management
- Supports configurable maximum frame length from 1518 up to 9600 jumbo frame
- Supports port-based ,802.1Q tag-based VLAN and private VLAN • Provides QoS function
- Supports port bandwidth control for ingress and egress • Supports packets storm control function for broadcast, unicast and multicast
- Supports MAC address learning, ageing and filtering control • Supports LACP port link aggregation
- Supports IEEE 802.1d, 802.1w, 802.1s STP (Spanning Tree Protocol), RSTP, MSTP • Provides port mirroring function
- Provides IP Multicasting with IGMP Snooping function • Supports DHCP client for dynamic IP configuration
- Supports 802.1X port-based radius authentication for access security • Provides ACL filtering function
- Provides port data rate control function • Supports SNTP Client • Supports LLDP
- Provides SNMP v1/v2C/v3 agent and event trap function • Supports Configuration download and upload
- 19" rack mountable • Both AC powered model and DC powered model are available for choice

	BADGER PART NUMBER:	Description
KGS-2422-S-24F-T	**KGS-2422-S-24F-T**	24 x 100M MM ST, AC Power
	KGS-2422-D-24F-T	24 x 100M MM ST, DC Power
KGS-2422-S-24F-C	**KGS-2422-S-24F-C**	24 x 100M MM SC, AC Power
	KGS-2422-D-24F-C	24 x 100M MM SC, DC Power
KGS-2422-S-24F-SL2	**KGS-2422-S-24F-SL2**	24 x 100M SM SC, AC Power
	KGS-2422-D-24F-SL2	24 x 100M SM SC, DC Power
KGS-2422-S-2U22F-T	**KGS-2422-S-2U22F-T**	22 x 100M MM ST + 2 Uplink copper, AC Power
	KGS-2422-D-2U22F-T	22 x 100M MM ST + 2 Uplink copper, DC Power
KGS-2422-S-2U22F-C	**KGS-2422-S-2U22F-C**	22 x 100M MM SC + 2 Uplink copper, AC Power
	KGS-2422-D-2U22F-C	22 x 100M MM SC + 2 Uplink copper, DC Power
KGS-2422-S-2U22F-SL2	**KGS-2422-S-2U22F-SL2**	22 x 100M SM SC + 2 Uplink copper, AC Power
	KGS-2422-D-2U22F-SL2	22 x 100M SM SC + 2 Uplink copper, DC Power
KGS-2422-S-24G	**KGS-2422-S-24G**	24 x 100/1000M SFP, AC Power
	KGS-2422-D-24G	24 x 100/1000M SFP, DC Power
KGS-2422-S-4U20G	**KGS-2422-S-4U20G**	20 x 100/1000M SFP + 4 Uplink copper, AC Power
	KGS-2422-D-4U20G	20 x 100/1000M SFP + 4 Uplink copper, DC Power
KGS-2422-S-8U16G	**KGS-2422-S-8U16G**	16 x 100/1000M SFP + 8 Uplink copper, AC Power
	KGS-2422-D-8U16G	16 x 100/1000M SFP + 8 Uplink copper, DC Power

NETWORK INFRASTRUCTURE SOLUTIONS

GIGABIT AND FAST ETHERNET NETWORKING SOLUTIONS

KGS-2420

Managed 24-Port Gigabit Ethernet Switch with 16 GbE SFP Ports

A 24-port Gigabit L2 Plus Managed Switch, is a standard switch that meets all IEEE 802.3/u/x/z Gigabit, Fast Ethernet specifications. 16-Port 1000Mbps SFP and 8-Port Combo Gigabit TP/SFP Fiber dual media management Ethernet switch. The switch can be managed through RS-232 serial port via directly connection, or through Ethernet port using CLI or Web-based management unit, associated with SNMP agent. With the SNMP agent, the network administrator can logon the switch to monitor, configure and control each port's activity in a friendly way

KGS-2420

- Provides 8 auto-negotiation tri-speed Gigabit Combo ports with RJ-45 jack and SFP slot
- Provides 24 Mini-GBIC fiber ports to support up to 24 Gigabit fiber connections • Provides non-blocking and wire speed forwarding and filtering
- Supports port-based and 802.1Q tag-based VLAN • Supports Quality of Service (QoS) based on the information taken from Layer 2 to Layer 4
- Supports IEEE 802.1d, 802.1w, 802.1s STP (Spanning Tree Protocol), RSTP, MSTP
- Supports 802.1X port-based radius authentication for access security • Supports IP Multicasting with IGMP Snooping function
- Supports configurable maximum frame length from 1518 up to 9KB jumbo frame • Supports static and LACP port link aggregation
- Provides port mirroring function • Provides SNMP event trap function • Provides event system log function
- Provides port data rate control function • Supports console and in-band web/telnet/SNMP interfaces for switch management
- Supports SNMP RMON • Supports TFTP for firmware update and switch configuration file upload/download

KGS-2420

SFP GBIC

BADGER PART NUMBER:	Deacription
KGS-2420	24-port Gigabit L2 Plus Managed Switch, Standard IEEE 802.3, 802.3u, 802.3ab, 802.3z, 802.3x, 802.1Q, 802.1p
1 Gig SFP+ Module Options	
SFP-GLS-10-A	1000Mbps LC, SM 10km, SFP Fiber transceiver
SFP-GLS-30-A	1000Mbps LC, SM 30km, SFP Fiber transceiver
SFP-GLS-50-A	1000Mbps LC, SM 50km, SFP Fiber transceiver
SFP-GLS-W3520-A	1000Mbps BiDi LC, type 1, SM 20km, SFP Fiber WDM transceiver
SFP-GLS-W5320-A	1000Mbps BiDi LC, type 2, SM 20km, SFP Fiber WDM transceiver
SFP-GLSD-10-A	1000Mbps LC, SM 10km, SFP Fiber transceiver with DDM

KGS-2404

16/24-Port 10/100/1000 Mbps Web Smart Gigabit Ethernet Switches

The 16/24-port Gigabit Web Smart Switches are a standard switch that meets all IEEE 802.3/u/x/z Gigabit, Fast Ethernet specifications. The switches have 12/20 10/100/1000Mbps TP ports and 4 Gigabit TP/SFP transceiver slots. It supports console, telnet, http and SNMP interface for switch management. The network administrator can logon the switch to monitor, configure and control each port's activity. In addition, the switch implements the QoS (Quality of Service), VLAN, and Trunking. It is suitable for office application.

KGS-2404

- Provide 16/24 10/100/1000Mbps Gigabit Ethernet ports and 4 SFP ports • Provide in-band web-based management interface
- Provide full wire speed forwarding • Support 802.3x flow control for full-duplex and backpressure for half-duplex
- Provide port status, statistic monitoring and control function • Support port-based, 802.1Q Tag-based VLAN • Provide QoS function
- Provide LACP link aggregation (trunking) function • Provide 802.1x port access authentication function • Support RSTP, STP function
- Provide port bandwidth control function • Support jumbo frames • Support SFP Modules hot-plugging

KGS-2404

SFP GBIC

BADGER PART NUMBER:	Description
KGS-2404	Web Smart 24-Port 10/100/1000Mbps Gigabit Ethernet Switch
1 Gig SFP+ Module Options	
SFP-GLS-10-A	1000Mbps LC, SM 10km, SFP Fiber transceiver
SFP-GLS-30-A	1000Mbps LC, SM 30km, SFP Fiber transceiver
SFP-GLS-50-A	1000Mbps LC, SM 50km, SFP Fiber transceiver
SFP-GLS-70-A	1000Mbps LC, SM 70km, SFP Fiber transceiver
SFP-GLS-110-A	1000Mbps LC, SM 110km, SFP Fiber transceiver
SFP-GLS-W3520-A	1000Mbps BiDi LC, type 1, SM 20km, SFP Fiber WDM transceiver
SFP-GLS-W5320-A	1000Mbps BiDi LC, type 2, SM 20km, SFP Fiber WDM transceiver
SFP-GLSD-10-A	1000Mbps LC, SM 10km, SFP Fiber transceiver with DDM

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KGS-124

16/24-Port 10/100/1000Base-T Gigabit Ethernet Switches

The 10BASE-T/100BASE-TX/1000BASE-T Switches, which are high-performance Gigabit Ethernet Switches designed for the network core. It provides 16/24 10BASE-T/100BASE-TX/1000BASE-T ports that can significantly improve the performance of your network's backbone, and deliver the throughput needed to support a broad range of advanced network applications. With Gigabit Ethernet Switches high performance band-width, it provides the quickest solution to meeting the growing demands on your network's limited resources

- All ports support auto-negotiation and auto-MDI/MDI-X detection
- Support full/half-duplex transfer mode for 10/100Mbps
- Support full-duplex transfer mode for 1000Mbps
- Wire speed reception and transmission
- Store-and-Forward switching method
- Self learning for active MAC addresses up to 8K entries
- Supports IEEE 802.3x flow control for full-duplex mode and backpressure flow control for halfduplex mode

BADGER PART NUMBER:
KGS-124

KGS-124

KGS-810F

Web Smart 8-Port Gigabit Ethernet Switch with 1 GbE SFP Port

The KGS-810F is a managed Gigabit Ethernet switch which is featured with the following switched ports: Seven 10/100/1000Mbps Gigabit copper ports One combo port - 10/100/1000Mbps copper & 1000Base-X SFP

- Provides 8 10/100/1000Mbps RJ-45 and one 1000M SFP slot
- Provides in-band web-based and SNMP management interface
- Copper ports support auto-negotiation and auto-MDI/MDI-X detection
- Provides full wire speed forwarding
- Supports 802.3x flow control for full-duplex and backpressure for half-duplex
- Provides port status, statistic monitoring and control function
- Supports DHCP IP configuration
- Supports port-based and 802.1Q Tag-based VLAN • Provides QoS function
- Provides link aggregation (port trunking) function with LACP support
- Provides port mirroring function
- Provides 802.1X authentication for port access
- Supports 802.1w RSTP, 802.1D STP and 802.1S MSTP
- Watchdog timer function
- Supports SFP with Digital Diagnostic Monitoring (DDM)
- Provides packet storm control function
- In-band embedded firmware upgrade function

KGS-810F

KGS-810F

SFP GBIC

BADGER PART NUMBER:	Description
KGS-810F-SX	Multimode SFP gigabit fiber module is included
KGS-810F-LX	Single Mode SFP gigabit fiber module is included
1 Gig SFP+ Module Options	
SFP-GLS-10-A	1000Mbps LC, SM 10km, SFP Fiber transceiver
SFP-GLS-30-A	1000Mbps LC, SM 30km, SFP Fiber transceiver
SFP-GLS-50-A	1000Mbps LC, SM 50km, SFP Fiber transceiver
SFP-GLS-70-A	1000Mbps LC, SM 70km, SFP Fiber transceiver
SFP-GLS-110-A	1000Mbps LC, SM 110km, SFP Fiber transceiver
SFP-GLS-W3520-A	1000Mbps BiDi LC, type 1, SM 20km, SFP Fiber WDM transceiver
SFP-GLS-W5320-A	1000Mbps BiDi LC, type 2, SM 20km, SFP Fiber WDM transceiver
SFP-GLSD-10-A	1000Mbps LC, SM 10km, SFP Fiber transceiver with DDM

**NETWORK INFRASTRUCTURE SOLUTIONS**

KGS-612F

Web Smart 6-Port Gigabit Ethernet Switch with 3 SFP Ports

• 6 10/100/1000 Mbps RJ-45 • one 1000M SFP and two 100M SFPs
• In-band web-based management interface • Provides full wire speed forwarding
• All copper ports support auto-negotiation and auto-MDI/MDI-X detection
• Supports 802.3x flow control for full-duplex and backpressure for half-duplex
• Provides port status, statistic monitoring and control function • SFP DDM support
• 802.1Q Tagged VLAN support • QoS WFQ support • Port mirroring function
• 802.1w RSTP, MSTP • LACP link aggregation • Watchdog timer function • 802.1x port access control

BADGER PART NUMBER:
KGS-612F
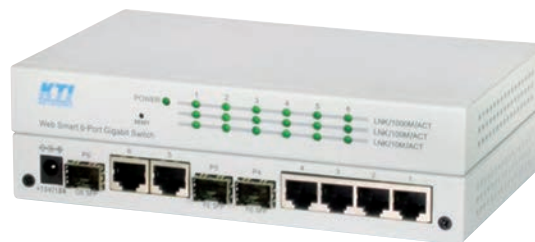
KGS-612F

KGS-510F

**Web Smart 6-Port Gigabit Ethernet Switch
with 1 mini-GBIC Port**

• 5 10/100/1000 Mbps Gigabit Ethernet ports and 1 SFP port
• In-band web-based management interface
• SFP Fiber support • 802.1Q Tagged VLAN support
• QoS WFQ support • Port link aggregation function
• Port mirroring function

KGS-510F

KGS-510F

SFP GBIC

BADGER PART NUMBER:	Description
KGS-510F-SX	Multimode SFP gigabit fiber module is included
KGS-510F-LX	Single Mode SFP gigabit fiber module is included
1 Gig SFP+ Module Options	
SFP-GLS-10-A	1000Mbps LC, SM 10km, SFP Fiber transceiver
SFP-GLS-30-A	1000Mbps LC, SM 30km, SFP Fiber transceiver
SFP-GLS-50-A	1000Mbps LC, SM 50km, SFP Fiber transceiver
SFP-GLS-70-A	1000Mbps LC, SM 70km, SFP Fiber transceiver
SFP-GLS-110-A	1000Mbps LC, SM 110km, SFP Fiber transceiver
SFP-GLS-W3520-A	1000Mbps BiDi LC, type 1, SM 20km, SFP Fiber WDM transceiver
SFP-GLS-W5320-A	1000Mbps BiDi LC, type 2, SM 20km, SFP Fiber WDM transceiver
SFP-GLSD-10-A	1000Mbps LC, SM 10km, SFP Fiber transceiver with DDM

KGS-2422

**Managed 24-Port Modular L2 Gigabit Ethernet
Switches with 100BASE-FX Support**

The 24-port Managed Gigabit Ethernet Switches are standard L2 switches
that meets all IEEE 802.3/u/x/z Gigabit, Fast Ethernet specifications.
The switches provide three 8-port modular slots. Each slot can accommodate
one 8-port module. A variety of modules is available for selection.
They include 10/100/1000M copper module, 100/1000M SFP module, Copper and SFP mixed modules, and Fast Ethernet fiber modules.
Different modules can be installed flexibly in one device rack. The system detects the types of the installed modules and configures the modules
automatically. With variety of modules and flexibility of installation, the switches can meet most requirements of deployment of fiber networks no
matter they are Gigabit Ethernet base, Fast Ethernet base or even combination of both.

KGS-2422

KGS-2422

BADGER PART NUMBER:	Description
KGS-2422-x	24-Port Main Unit, with AC or DC Power, without any slide-in modules
Module Options	
KGS-2422-x-24F-T	24 x 100M MM ST
KGS-2422-x-24F-C	24 x 100M MM SC
KGS-2422-x-24F-SL2	24 x 100M SM SC
KGS-2422-x-2U22F-T	22 x 100M MM ST + 2 Uplink copper
KGS-2422-x-2U22F-C	22 x 100M MM SC + 2 Uplink copper
KGS-2422-x-2U22F-SL2	22 x 100M SM SC + 2 Uplink copper
KGS-2422-x-24G	24 x 100/1000M SFP
KGS-2422-x-4U20G	20 x 100/1000M SFP + 4 Uplink copper
KGS-2422-x-8U16G	16 x 100/1000M SFP + 8 Uplink copper

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GIGABIT AND FAST ETHERNET NETWORKING SOLUTIONS

KTI NETWORKS

KS-116/KS-124

16/24-Port 10/100 Rack-Mountable Switch

The 10BASE-T/100BASE-TX Switches which are high-performance Fast Ethernet switches designed for the network core. It provides 16/24 10BASE-T/100BASE-TX ports that can significantly improve the performance of your network's backbone, and deliver the throughput needed to support a broad range of advanced network applications. With Fast Ethernet Switches high performance bandwidth, it provides the quickest solution to meeting the growing demands on your network's limited resources

- Provide 16/24 10/100Mbps Fast Ethernet ports • All ports support auto-negotiation and auto-MDI/MDI-X detection
- Support full/half-duplex transfer mode for 10/100Mbps • Wire speed reception and transmission
- Store-and-Forward switching method • Self learning for active MAC addresses up to 8K entries
- Supports IEEE 802.3x flow control for full-duplex mode and backpressure flow control for halfduplex mode

KS-116, KS-124

BADGER PART NUMBER:	Description
KS-116	16-Port 10/100 Workgroup Fast Ethernet Switches
KS-124	24-Port 10/100 Workgroup Fast Ethernet Switches

KS-105F/KS-108F

5/8-Port Fast Ethernet Switches with 1 Fiber Connection

This 5/8-port Fast Ethernet switch series provides four 10/100 TP ports and one 100BASE-FX fiber port, each capable of transmitting or receiving information simultaneously at full wire speed to control and allocate the network bandwidth

- 4/7 UTP 10/100Base-TX Fast Ethernet Ports • 1 Fiber Front Port (Pre-Configured)
- Mix 10Base-T, 100Base-TX, Fiber • Compact • External Power Supply • Non-Rack-Mount
- Plastic Housing • Specify Front Fiber Port from Models shown to the right

KS-108F

KS-105F

KS-108F

BADGER PART NUMBER:	Description
KS-105F-T	1 ST Port, Multi-Mode, Up to 2 KM • 4 UTP Ports
KS-105F-C	1 SC Port, SC, Multi-Mode, Up to 2 KM • 4 UTP Ports
KS-105F-JM	1 MT-RJ Port, Multi-Mode, Up to 2 KM • 4 UTP Ports
KS-105F-VM	1 VF-45 Port, Multi-Mode, Up to 2 KM • 4 UTP Ports
KS-105F-SA2	1 SC Port, Single-Mode, Up to 20 KM • 4 UTP Ports
KS-105F-SL2	1 SC Port, Single-Mode, Up to 20 KM • 4 UTP Ports
KS-105F-SL3	1 SC Port, Single-Mode, Up to 30 KM • 4 UTP Ports
KS-105F-SL4	1 SC Port, Single-Mode, Up to 40 KM • 4 UTP Ports
KS-105F-SL6	1 SC Port, Single-Mode, Up to 60 KM • 4 UTP Ports
KS-105F-SL7	1 SC Port, Single-Mode, Up to 70 KM • 4 UTP Ports
KS-105F-SL9	1 SC Port, Single-Mode, Up to 90 KM • 4 UTP Ports
KS-105F-SL10	1 SC Port, Single-Mode, Up to 100 KM • 4 UTP Ports
KS-105F-SL12	1 SC Port, Single-Mode, Up to 120 KM • 4 UTP Ports
KS-105F-W3515	1 Bi-Di SC Port, Single-Mode, Up to 15-20 KM • 4 UTP Ports
KS-105F-W5315	1 Bi-Di SC Port, Single-Mode, Up to 15-20 KM • 4 UTP Ports
KS-105F-W3540	1 Bi-Di SC Port, Single-Mode, Up to 40 KM • 4 UTP Ports
KS-105F-W5340	1 Bi-Di SC Port, Single-Mode, Up to 40 KM • 4 UTP Ports
KS-108F-T	1 ST Port, Multi-Mode, Up to 2 KM • 4 UTP Ports
KS-108F-C	1 SC Port, SC, Multi-Mode, Up to 2 KM • 4 UTP Ports
KS-108F-JM	1 MT-RJ Port, Multi-Mode, Up to 2 KM • 4 UTP Ports
KS-108F-VM	1 VF-45 Port, Multi-Mode, Up to 2 KM • 4 UTP Ports
KS-108F-SA2	1 SC Port, Single-Mode, Up to 20 KM • 4 UTP Ports
KS-108F-SL2	1 SC Port, Single-Mode, Up to 20 KM • 4 UTP Ports
KS-108F-SL3	1 SC Port, Single-Mode, Up to 30 KM • 4 UTP Ports
KS-108F-SL4	1 SC Port, Single-Mode, Up to 40 KM • 4 UTP Ports
KS-108F-SL6	1 SC Port, Single-Mode, Up to 60 KM • 4 UTP Ports
KS-108F-SL7	1 SC Port, Single-Mode, Up to 70 KM • 4 UTP Ports
KS-108F-SL9	1 SC Port, Single-Mode, Up to 90 KM • 4 UTP Ports
KS-108F-SL10	1 SC Port, Single-Mode, Up to 100 KM • 4 UTP Ports
KS-108F-SL12	1 SC Port, Single-Mode, Up to 120 KM • 4 UTP Ports
KS-108F-W3515	1 Bi-Di SC Port, Single-Mode, Up to 15-20 KM • 4 UTP Ports
KS-108F-W5315	1 Bi-Di SC Port, Single-Mode, Up to 15-20 KM • 4 UTP Ports
KS-108F-W3540	1 Bi-Di SC Port, Single-Mode, Up to 40 KM • 4 UTP Ports
KS-108F-W5340	1 Bi-Di SC Port, Single-Mode, Up to 40 KM • 4 UTP Ports

NETWORK INFRASTRUCTURE SOLUTIONS

NETWORK INFRASTRUCTURE SOLUTIONS

KS-115FM-V/KS-117FM-V

Web-Smart Managed 5/7-Port 10/100 Fast Ethernet Switches with 1 Fiber Connection

This is a smart managed switch. It is easily for configure the setting of each port and VLAN Function by Web management.

- Provide 4/6 10/100Mbps Fast Ethernet ports and 1 100Base-FX port
- Each TP port supports auto-negotiation and auto-MDI/MDI-X detection
- Support full/half-duplex operation for each TP switched port
- Support a variety of fiber connectors such as ST, SC, MT-RJ, VF-45 and LC
- Multimode and single mode fiber cables (model dependent)
- Self learning for active MAC addresses up to 2K entries
- Store-and-forward switching that only good packets are forwarded • Forwarding and filtering at full wire speed
- Flow control for traffic congestion • Broadcast packet storm protection • Comprehensive LED indicators
- Comply with IEEE 802.3 10Base-T and IEEE 802.3u 100Base-TX, 100Base-FX standards

KS-115FM-V

KS-115FM-V

KS-117FM-V

BADGER PART NUMBER:	Description
KS-115FM-VT	1 ST Port, Multi-Mode, Up to 2 KM
KS-115FM-VC	1 SC Port, SC, Multi-Mode, Up to 2 KM
KS-115FM-VJM	1 MT-RJ Port, Multi-Mode, Up to 2 KM
KS-115FM-VVM	1 VF-45 Port, Multi-Mode, Up to 2 KM
KS-115FM-VSA2	1 SC Port, Single-Mode, Up to 20 KM
KS-115FM-VSL2	1 SC Port, Single-Mode, Up to 20 KM
KS-115FM-VSL3	1 SC Port, Single-Mode, Up to 30 KM
KS-115FM-VSL4	1 SC Port, Single-Mode, Up to 40 KM
KS-115FM-VSL6	1 SC Port, Single-Mode, Up to 60 KM
KS-115FM-VW3515	1 Bi-Di SC Port, Single-Mode, Up to 15-20 KM
KS-115FM-VW5315	1 Bi-Di SC Port, Single-Mode, Up to 15-20 KM
KS-117FM-VT	1 ST Port, Multi-Mode, Up to 2 KM
KS-117FM-VC	1 SC Port, SC, Multi-Mode, Up to 2 KM
KS-117FM-VJM	1 MT-RJ Port, Multi-Mode, Up to 2 KM
KS-117FM-VVM	1 VF-45 Port, Multi-Mode, Up to 2 KM
KS-117FM-VSA2	1 SC Port, Single-Mode, Up to 20 KM
KS-117FM-VSL2	1 SC Port, Single-Mode, Up to 20 KM
KS-117FM-VSL3	1 SC Port, Single-Mode, Up to 30 KM
KS-117FM-VSL4	1 SC Port, Single-Mode, Up to 40 KM
KS-117FM-VSL6	1 SC Port, Single-Mode, Up to 60 KM
KS-117FM-VW3515	1 Bi-Di SC Port, Single-Mode, Up to 15-20 KM
KS-117FM-VW5315	1 Bi-Di SC Port, Single-Mode, Up to 15-20 KM

KS-SOHO-8

8-Port Dual-Speed SoHo 10/100 Switch

The 10BASE-T/100BASE-TX Switches which are high-performance Fast Ethernet Switches designed for the network core. It provides 8 10BASE-T/100BASE-TX ports that can significantly improve the performance of your network's backbone, and deliver the throughput needed to support a broad range of advanced network applications. With Switches high performance band-width, it provides the quickest solution to meeting the growing demands on your network's limited resources

- 8 UTP 10/100Base-TX Fast Ethernet Ports
- Auto-Sensing Ports
- Mix 10Base-T and 100Base-TX
- Compact Design
- Small Footprint
- External Power Supply
- Non-Rack-Mountable
- Front LEDs and Ports
- Plastic Housing

BADGER PART NUMBER:
KS-SOHO-8

KS-SOHO-8

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KGC-300

1000Base-T to 1000Base-X Gigabit Media Converters

The Gigabit media converter is designed to convert 1000Base-T signals to/from 1000Base-X fiber signals. It is used to extend the connection distance between two Gigabit Ethernet devices via fiber cable transparently with no performance degradation.

- Support transparent conversion of any packet types • Support auto-negotiation with link partners
- Provide link pass-through between copper and fiber link • Support optional DIN-Rail installation
- Provide SFP on fiber port for mounting variety of fiber options
- Ideal solution for multi-mode, short reach up to long reach SM fiber, Bi-Di and CWDM applications

KGC-300

KGC-300

BADGER PART NUMBER:	Description
KGC-300	Free SFP, no SFP transceiver
KGC-300-SX	1 LC Port, MMF, Up to 500 M
KGC-300-ESX	1 LC Port, MMF, Up to 500 M
KGC-300-LX	1 LC Port, MMF – Up to 550 M, SMF – Up to 10 KM
KGC-300-ELX	1 LC Port, MMF – Up to 550 M, SMF – Up to 10 KM
KGC-300-LX20	1 LC Port, SMF, Up to 20 KM
KGC-300-LX30	1 LC Port, SMF, Up to 30 KM
KGC-300-LX50	1 LC Port, SMF, Up to 50 KM
KGC-300-LX70	1 LC Port, SMF, Up to 70 KM
KGC-300-W3510	1 Bi-Di LC Port, SMF, Up to 10 KM
KGC-300-W5310	1 Bi-Di LC Port, SMF, Up to 10 KM
KGC-300-W3520	1 Bi-Di LC Port, SMF, Up to 20 KM
KGC-300-W5320	1 Bi-Di LC Port, SMF, Up to 20 KM
KGC-300-W3410	1 Bi-Di LC Port, SMF, Up to 10 KM
KGC-300-W4310	1 Bi-Di LC Port, SMF, Up to 10 KM
KGC-300-W3410S	1 Bi-Di SC Port, SMF, Up to 10 KM
KGC-300-W4310S	1 Bi-Di SC Port, SMF, Up to 10 KM
KC-3DR	Optional Din-Rail bracket

KGC-311

Industrial Multimode to Single Mode Optical Fiber Media Converters

Mode to mode optical fiber converter series which provide the following conversions:
1000BASE-SX MM fiber to/from 1000BASE-LX SM fiber
100BASE-FX MM fiber to/from 100BASE-FX SM fiber

- Provide media conversion between single mode and multimode optical fiber media types
- Support both 1000Mbps Gigabit Ethernet fiber and 100Mbps Fast Ethernet fiber applications
- Full wire speed performance • SFP flexibility • Low power consumption
- Optional DIN-Rail mounting • Center Chassis installation support • Options for Bi-Di communication

KGC-311

KGC-311

KC-1300

BADGER PART NUMBER:	Description
KGC-311-FSL3	FE, MM port 2 KM, SM port 30 KM
KGC-311-FSL6	FE, MM port 2 KM, SM port 60 KM
KGC-311-FSL10	FE, MM port 2 KM, SM port 100 KM
KGC-311-FW3520	FE, MM port 2 KM, SM port Bi-Di 20 KM
KGC-311-FW5320	FE, MM port 2 KM, SM port Bi-Di 20 KM
KGC-311-LX	GbE, MM port 200/500 M, SM port 10 KM
KGC-311-LX20	GbE, MM port 200/500 M, SM port 20 KM
KGC-311-LX30	GbE, MM port 200/500 M, SM port 30 KM
KGC-311-LX50	GbE, MM port 200/500 M, SM port 50 KM
KGC-311-LX70	GbE, MM port 200/500 M, SM port 70 KM
KGC-311-W3510	GbE, MM port 200/500 M, SM port Bi-Di 10 KM
KGC-311-W5310	GbE, MM port 200/500 M, SM port Bi-Di 10 KM
KGC-311-W3520	GbE, MM port 200/500 M, SM port Bi-Di 20 KM
KGC-311-W5320	GbE, MM port 200/500 M, SM port Bi-Di 20 KM
KGC-311-W3410	GbE, MM port 200/500 M, SM port Bi-Di 10 KM
KGC-311-W4310	GbE, MM port 200/500 M, SM port Bi-Di 10 KM
KGC-311-W3410S	GbE, MM port 200/500 M, SM port Bi-Di 10 KM
KGC-311-W4310S	GbE, MM port 200/500 M, SM port Bi-Di 10 KM
KC-3DR	Optional Din-Rail bracket
KC-1300	Center chassis installation support

NETWORK INFRASTRUCTURE SOLUTIONS

KGC-310M

Web-Smart 10/100/1000Base-T to 1000Base-X Gigabit Media Converter

- Tri-speed 10/100/1000 Mbps copper to 1000 M fiber conversion
- Support full-wire speed conversion for Gigabit copper to Gigabit fiber
- Support auto-negotiation with link partners
- Provide SFP on fiber port for mounting variety of fiber options
- Support optional DIN-Rail installation
- Ideal solution for multi-mode, short reach up to long reach, single mode fiber, Bi-Di applications

KGC-310M

KGC-310M

KC-1300

BADGER PART NUMBER:	Description
KGC-310M-SX	1 LC Port, MMF – Up to 500 M
KGC-310M-LX	1 LC Port, MMF – Up to 550 M, SMF – Up to 10 KM
KGC-310M-LX20	1 LC Port, SMF, Up to 20 KM
KGC-310M-LX30	1 LC Port, SMF, Up to 30 KM
KGC-310M-LX50	1 LC Port, SMF, Up to 50 KM
KGC-310M-LX70	1 LC Port, SMF, Up to 70 KM
KGC-310M-W3510	1 Bi-Di LC Port, SMF, Up to 10 KM
KGC-310M-W5310	1 Bi-Di LC Port, SMF, Up to 10 KM
KGC-310M-W3520	1 Bi-Di LC Port, SMF, Up to 20 KM
KGC-310M-W5320	1 Bi-Di LC Port, SMF, Up to 20 KM
KGC-310M-W3410	1 Bi-Di LC Port, SMF, Up to 10 KM
KGC-310M-W4310	1 Bi-Di LC Port, SMF, Up to 10 KM
KGC-310M-W3410S	1 Bi-Di SC Port, SMF, Up to 10 KM
KGC-310M-W4310S	1 Bi-Di SC Port, SMF, Up to 10 KM
KC-3DR	Optional Din-Rail bracket
KC-1300	Center chassis installation support

KC-1300

Intelligent Media Converter Center Chassis

KC-1300 Intelligent Media Converter Chasis provides 16 slots for standalone media converter - KC-300D/DM series. Each standalone media onverter can be easily slided in chasis. KC-1300 also supports optional console, telnet, web, SNMP, and event SNMP trap management interfaces

- 16-Slot Modular Media Converter Chassis for KC-300 Series Modules
- Internal Power Supply • 19" Rack-Mountable

KC-1300

KC-1300

KGC-310M   KC-300D

KGC-311   KGC-300

BADGER PART NUMBER:	Description
KC-1300-1A	One A/C Power Supply
KC-1300-2A	Redundant A/C Power Supply
KC-1300L-1A	Managed one A/C Power Supply
KC-1300L-2A	Managed redundant A/C Power Supply
KC-1300-1D	One D/C Power Supply
KC-1300-2D	Redundant D/C Power Supply
KC-1300L-1D	Managed one D/C Power Supply
KC-1300L-2D	Managed redundant D/C Power Supply
KC-300D	10/100BASE-TX to 100BASE-FX media converters
GKC-300	1000Base-T to 1000Base-X Gigabit media converters
KGC-310M	Web Smart 10/100/1000Base-T to 1000Base-X Gigabit media converter.
KGC-311	Industrial Multimode to Single Mode Optical Fiber Media Converters
KC-300DM	10/100BASE-TX to 100BASE-FX media converters

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GIGABIT AND FAST ETHERNET NETWORKING SOLUTIONS

KTI NETWORKS

KC-300D/KC-300DM
10/100Base-TX to 100Base-FX Media Converters

The media converters are designed to convert 10Base-T or 100Base-T signals to/from 100Base-FX fiber signals. It is used to extend the connection distance between two Ethernet devices via fiber cable transparently with no performance degradation. The media converters not only support existing variety of multimode and single mode fibers but also support Bi-Di WDM and CWDM fiber network applications. It is also featured with design to support center chassis installation with optional power redundancy and management features when a larger fiber network is required.

- Full wire speed performance • Options for CWDM • Comprehensive configuration options
- Low power consumption • Optional DIN-Rail mounting • Options for Bi-Di communication
- Center Chassis installation support

KC-300DM

KC-300D

BADGER PART NUMBER:	Description
KC-300D-T	Dual ST Port, Multi-Mode, 2 KM
KC-300D-C	Dual SC Port, SC, Multi-Mode, 2 KM
KC-300D-JM	MT-RJ Port, Multi-Mode, 2 KM
KC-300D-VM	VF-45 Port, Multi-Mode, 2 KM
KC-300D-SA2	Dual SC Port, Single-Mode, 20 KM
KC-300D-SL2	Dual SC Port, Single-Mode, 20 KM
KC-300D-SL3	Dual SC Port, Single-Mode, 30 KM
KC-300D-SL4	Dual SC Port, Single-Mode, 40 KM
KC-300D-SL6	Dual SC Port, Single-Mode, 60 KM
KC-300D-SL8	Dual SC Port, Single-Mode, 80 KM
KC-300D-SL10	Dual SC Port, Single-Mode, 100 KM
KC-300D-SL12	Dual SC Port, Single-Mode, 120 KM
KC-300D-W3515	Bi-Di SC Port, Single-Mode, 15-20 KM
KC-300D-W5315	Bi-Di SC Port, Single-Mode, 15-20 KM
KC-300D-W3540	Bi-Di SC Port, Single-Mode, 40 KM
KC-300D-W5340	Bi-Di SC Port, Single-Mode, 40 KM
KC-300D-W3580	Bi-Di SC Port, Single-Mode, 80 KM
KC-300D-W5380	Bi-Di SC Port, Single-Mode, 80 KM
KC-300D-CxxW40	CWDM SC Port, Single-Mode, 40 KM
KC-300D-CxxW50	CWDM SC Port, Single-Mode, 50 KM
KC-300D-CxxW80	CWDM SC Port, Single-Mode, 80 KM
KC-300DM-T	Dual ST Port, Multi-Mode, 2 KM, Remote TP link monitoring
KC-300DM-C	Dual SC Port, SC, Multi-Mode, 2 KM, Remote TP link monitoring
KC-300DM-JM	MT-RJ Port, Multi-Mode, 2 KM, Remote TP link monitoring
KC-300DM-VM	VF-45 Port, Multi-Mode, 2 KM, Remote TP link monitoring
KC-300DM-SA2	Dual SC Port, Single-Mode, 20 KM, Remote TP link monitoring
KC-300DM-SL2	Dual SC Port, Single-Mode, 20 KM, Remote TP link monitoring
KC-300DM-SL3	Dual SC Port, Single-Mode, 30 KM, Remote TP link monitoring
KC-300DM-SL4	Dual SC Port, Single-Mode, 40 KM, Remote TP link monitoring
KC-300DM-SL6	Dual SC Port, Single-Mode, 60 KM, Remote TP link monitoring
KC-300DM-SL8	Dual SC Port, Single-Mode, 80 KM, Remote TP link monitoring
KC-300DM-SL10	Dual SC Port, Single-Mode, 100 KM, Remote TP link monitoring
KC-300DM-SL12	Dual SC Port, Single-Mode, 120 KM, Remote TP link monitoring
KC-300DM-W3515	Bi-Di SC Port, Single-Mode, 15-20 KM, Remote TP link monitoring
KC-300DM-W5315	Bi-Di SC Port, Single-Mode, 15-20 KM, Remote TP link monitoring
KC-300DM-W3540	Bi-Di SC Port, Single-Mode, 40 KM, Remote TP link monitoring
KC-300DM-W5340	Bi-Di SC Port, Single-Mode, 40 KM, Remote TP link monitoring
KC-300DM-W3580	Bi-Di SC Port, Single-Mode, 80 KM, Remote TP link monitoring
KC-300DM-W5380	Bi-Di SC Port, Single-Mode, 80 KM, Remote TP link monitoring
KC-300DM-CxxW40	CWDM SC Port, Single-Mode, 40 KM, Remote TP link monitoring
KC-300DM-CxxW50	CWDM SC Port, Single-Mode, 50 KM, Remote TP link monitoring
KC-300DM-CxxW80	CWDM SC Port, Single-Mode, 80 KM, Remote TP link monitoring
KC-3DR	Optional Din-Rail bracket
KC-1300	Center chassis installation support

KC-1300

NETWORK INFRASTRUCTURE SOLUTIONS

Every effort has been made to ensure the integrity of this catalog. Badger Communications cannot be held responsible for any misrepresentation associated with any products due to omissions, typographic errors or misprints.

GIGABIT AND FAST ETHERNET NETWORKING SOLUTIONS

KC-350/KC-351

PoE-PD-enabled 10/100Base-TX to 100Base-FX Media Converters

The 350 series are designed to convert 10Base-T or 100Base-T signals to/from 100Base-FX fiber signals. They are used to extend the connection distance between two Ethernet devices via fiber cable transparently with no performance degradation. The variety of fiber options supported includes not only multimode, short reach up to long reach single mode fibers, but also Bi-Di WDM and CWDM fiber network applications. Because of 802.3af compliance, the converters can draw the power via Cat.5 cable connected to a PoE PSE switch or mis-span injector. This feature makes the converter ideal for remote areas of a network without AC power outlets

• Full wire speed performance • Comprehensive configuration options
• Best Conversion Latency • Remote Loop Back Test • Remote TP Link Monitoring
• Optional DIN-Rail Mounting • Powered by PoE, AC Adapter, USB • Options for Bi-Di Communication
• Options for CWDM

KC-350

KC-350

KC-351

BADGER PART NUMBER:	Description
KC-350-T	Dual ST Port, Multi-Mode, 2 KM
KC-350-C	Dual SC Port, Multi-Mode, 2 KM
KC-350-SL2	Dual SC Port, Single-Mode, 20 KM
KC-350-SL3	Dual SC Port, Single-Mode, 30 KM
KC-350-SL4	Dual SC Port, Single-Mode, 40 KM
KC-350-SL6	Dual SC Port, Single-Mode, 60 KM
KC-350-SL8	Dual SC Port, Single-Mode, 80 KM
KC-350-SL10	Dual SC Port, Single-Mode, 100 KM
KC-350-SL12	Dual SC Port, Single-Mode, 120 KM
KC-350-W3515	Bi-Di SC Port, Single-Mode, 15-20 KM
KC-350-W5315	Bi-Di SC Port, Single-Mode, 15-20 KM
KC-350-CxxW40	CWDM SC Port, Single-Mode, 40 KM
KC-351-T	Dual ST Port, Multi-Mode, 2 KM, Remote TP link monitoring
KC-351-C	Dual SC Port, Multi-Mode, 2 KM, Remote TP link monitoring
KC-351-SL2	Dual SC Port, Single-Mode, 20 KM, Remote TP link monitoring
KC-351-SL3	Dual SC Port, Single-Mode, 30 KM, Remote TP link monitoring
KC-351-SL4	Dual SC Port, Single-Mode, 40 KM, Remote TP link monitoring
KC-351-SL6	Dual SC Port, Single-Mode, 60 KM, Remote TP link monitoring
KC-351-SL8	Dual SC Port, Single-Mode, 80 KM, Remote TP link monitoring
KC-351-SL10	Dual SC Port, Single-Mode, 100 KM, Remote TP link monitoring
KC-351-SL12	Dual SC Port, Single-Mode, 120 KM, Remote TP link monitoring
KC-351-W3515	Bi-Di SC Port, Single-Mode, 15-20 KM, Remote TP link monitoring
KC-351-W5315	Bi-Di SC Port, Single-Mode, 15-20 KM, Remote TP link monitoring
KC-351-CxxW40	CWDM SC Port, Single-Mode, 40 KM, Remote TP link monitoring
KS-1080	PoE PSE switch
KPOE-100	PoE PSE mid-span injector
KC-3DR	Optional Din-Rail bracket

KC-10FM

10Base-T to 10Base-FL Fiber Media Converters

These converters are designed to convert 10Base-T to/from 10Base-FL media types, and it supports three fiber connector types: multimode ST, SC and single mode ST connectors respectively. All three models support convenient connection to either a straight-through or a cross-over cable on the UTP end. The KC-10 Series is a cost effective and easy solution for using in a mixed cabling environment or extending the network span to include a fiber optic backbone

• Converts 10Base-T UTP To a 10Base-FL Fiber Optic Cable Network
• Supports Traffic Up to 10 Mbit/sec • Single Ethernet Fiber Converter
• Provides 2 KM of Fiber Optic Segment • ORDER BY PAIR
• Supports MM/ST, SC, SM/ST Media Types

KC-10FM

KC-10FM

BADGER PART NUMBER:	Description
KC-10FM-T	ST/MMF, 2 KM
KC-10FM-C	SC/MMF, 2 KM
KC-10FM-S20	ST/SMF, 20 KM

View our searchable electronic catalog at: www.badgercommunications.com

KTI
NETWORKS

KF-221FX

100Base-FX Fast Ethernet PCI Adapter

This adapter features fiber connectors for a 100 Mbps IEEE 802.3u Ethernet network connection over optical fiber cable. The seriesprovides different fiber transceiver types supporting short, middle, and long reach applications

- 10/100Base-FX Fiber Ethernet 32-bit PCI NIC • Boot ROM Option
- Plug-N-Play • Max Length 2 KM (6600 ft.) Fiber - ST and SC
- PCI Bus-Compatible • Auto-Detects-10Base-T/100Base-TX
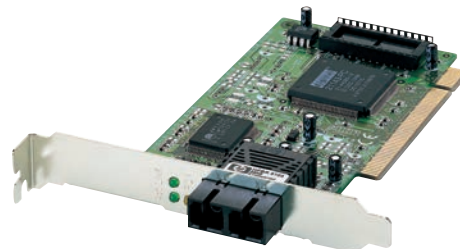
KF-221FX

KF-221FX

BADGER PART NUMBER:	Description
KF-221FX-T	Dual ST Port, MMF, 2 KM
KF-221FX-C	Dual SC Port, MMF, 2 KM
KF-221FX-JM	MT-RJ, MMF, 2 KM
KF-221FX-VM	VF-45, MMF, 2 KM
KF-221FX-SA2	Dual SC, SMF, 20 KM
KF-221FX-SL2	Dual SC, SMF, 20 KM
KF-221FX-SL3	Dual SC, SMF, 30 KM
KF-221FX-SL4	Dual SC, SMF, 40 KM
KF-221FX-W3515	Bi-Di SC, SMF, 15-20 KM
KF-221FX-W5315	Bi-Di SC, SMF, 15-20 KM

KG-500F

1000Base-X Gigabit Ethernet PCI Adapter with SFP Support

The 1000BASE-X Gigabit Ethernet PCI Adapter is a 32-bit LAN adapter for use in personal computers with PCI computer bus slots. This adapter features a mini-GBIC fiber connector (SFP) for a 1000 Mbps IEEE 802.3z Ethernet network connection over optical fiber cable. The series provides different fiber transceiver types supporting short, middle, and long reach applications.

- 32-bit 33/66MHz PCI of Rev.2.1/2.2/2.3 specification
- IEEE 802.3z 1000Base-SX/LX compliant • Provides Tx 8K / Rx 64KB RAM buffer
- Full duplex operation up to 2000Mbps data rate over fiber • Full duplex flow control
- Plug-and-Play installation • LED indicators for easy diagnostic
- Provides SFP to support variety of fiber transceivers
- Complete driver support for most operating systems
- Supports 802.1Q VLAN tagging
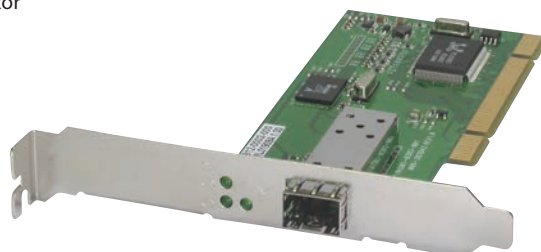
KG-500F

KG-500F

BADGER PART NUMBER:	Description
KG-500F-SX	LC Connector, MMF, 200 M
KG-500F-LX	LC Connector, MMF, 550 M; SMF, 10 KM

KT-10B/KT-10F/KT-10T

10Base2/-T/-FL Ethernet Transceivers

The KTI Ethernet transceiver family is a IEEE 802.3 compliant Ethernet transceiver series that provides a complete interface of the AUI port to a thin Ethernet cable, a UTP cable and a Fiber Optic cable connections.

- Connects AUI port to a 10Base-T network
- Comply with IEEE 802.3 standard
- Support network traffic at a rate of 10 Mbit/sec
- Support Ethernet configuration using CSMA/CD access method based on IEEE 802.3 standard

KT-10B

KT-10T

KT-10F

KT-10 Family

BADGER PART NUMBER:	Description
KT-10B	10Base2 Ethernet Transceiver
KT-10T	10Base-T Ethernet Transceiver
KT-10F	10Base-FL Ethernet Transceiver (Complies with EMI Class B)

NETWORK INFRASTRUCTURE SOLUTIONS

Every effort has been made to ensure the integrity of this catalog. Badger Communications cannot be held responsible for any misrepresentation associated with any products due to omissions, typographic errors or misprints.

NETWORK INFRASTRUCTURE SOLUTIONS

Founded in 1987, Multi-Link, Inc. is a Kentucky-based manufacturer dedicated to the development and marketing of high-quality telecommunications devices, including remote power management and fax phone switch devices, for a wide variety of commercial and government applications. As the premier company in telephone line sharing products, thousands of companies utilize Multi-Link devices to reduce their telecommunications cost through more efficient use of phone lines. Many of our customers have achieved millions of dollars in telecommunication costs savings and most customers achieve their ROI in less than 90 days.

Multi-Link's line sharing products are compatible with nearly all of today's current telephony services including POTS, VoIP ATA's, Voice over Fiber, and cable phone service.

• "THE STICK" is designed to be installed on an analog/simulated phone line and uses tone and fax recognition to auto-route calls.
• Phone Line Sharing Devices save money by eliminating dedicated phone lines - maximize the use of existing lines!
• "Add Equipment without Adding Phone Lines" - ideal for remote site management and equipment access!

THE STICK®

Automatic Voice/Data Switching Device
• 4-Port Switching Device (Phone, Answering Machine, Fax, Modem)
• User-Programmable (Local/Remote) • Auto-Fax Detection and Call Routing
• Non-volatile memory retains programming in the event of a power failure
• Toll-free factory direct programming/Remote Diagnostics
• DSL-Compatible • Barge-In Protection between device ports
• Selectable auto-transfer to either fax or modem ports from a TAD or unanswered call
• Call Grab • CID Compatible • Voice calls ring all phones connected into voice port of STICK
• Extension Transfer from a Single-Line Phone
• If Stick loses power, Ports V1 & V2 will pass Telco dial-tone to connected devices
• For KSU, install before the KSU on the last line
• OPTIONAL Security Lock-Box available, preventing tampering and accidental disconnects (#STICK-LOCKBOX)
• 1-year warranty

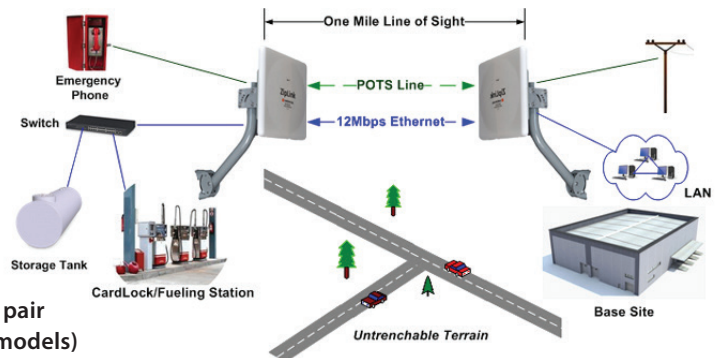**BADGER PART NUMBER:**
STICK
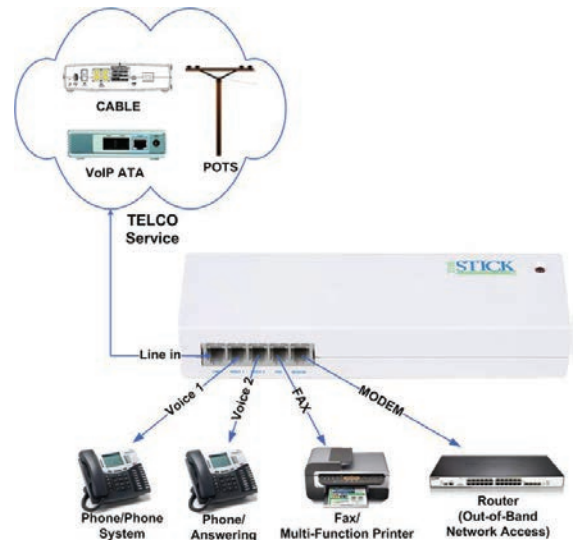
ZIPLINK® SERIES | WIRELESS POTS LINE & ETHERNET EXTENDERS

Don't let "Last Mile" obstacles derail your Datacom installation project or bust your budget. Avoid trenching to hard to reach remote sites with the ZipLink Series, Wireless POTS Line & Ethernet Extenders from Multi-Link. Available in four models.

• NO trenching costs or delays – SAVE $$$!
• NO permits/licenses required; 5.8GHz Radio Band
• NO radio experience necessary*
• FULL Duplex communication
• Military grade encryption
• Complete working system in a box
* *Installer needs to be familiar with basic cabling standards*

ZipLink ships as a complete working system:
MASTER and REMOTE end radios; Pre-configured as working pair
2 x power adapters (POE injectors for ZipLink-E and Xtreme models)
2 x 100 ft. of outdoor Cat 3 cable (Cat 5e for ZipLink-E and X/200 models)
2 x wall pole mount and brackets & all necessary screws, nuts, lock washers

BADGER PART NUMBER:

ZipLink-1	Wirelessly extend 1 POTS (phone) line and 12 Mbps Ethernet Connectivity up to one mile line of sight.
ZipLink-2	Wirelessly extend 2 POTS (phone) lines and 12 Mbps Ethernet Connectivity up to one mile line of sight.
ZipLink-E	Wirelessly extend 40 Mbps Ethernet Connectivity up to one mile line of sight.
ZipLink-X/200	Wirelessly extend 200 Mbps Ethernet Connectivity up to 3 miles line of sight.

multi-link inc.

ACP | Series 2.0

Out-of-Band Network Switch & Call Router

Benefits:
• Reduces or eliminates costly dedicated phone lines
• Secures dial-up modems from unauthorized access
• Automatically directs calls to phone, fax, or dial-up modems
• Shares 3, 5, or 9 telephony devices with one phone line

New Features!
• HACKER SHIELD PROTECTION
• Caller ID "Store & Forward"
• Multiple Line Seizure Ports
• Simplified Installation • LED Status Display
• Data Disruption Protection • Remote Programming

Standard Features:
• Automatic Fax Detection • Dual Surge Protection
• Mounting Bracket Included
• 2-Year Warranty • Proudly Made in USA

BADGER PART NUMBER:

ACP-300	3 device port switch
ACP-500	5 device port switch
ACP-900	9 device port switch
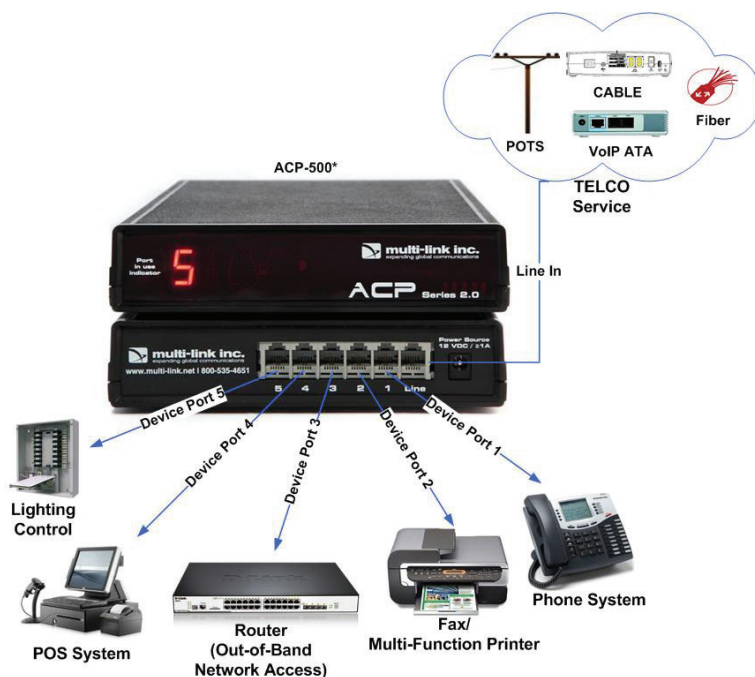
POWER CONTROL DEVICES - REMOTE REBOOTING

IP POWER STONE® 4000

Two Outlet Remote AC-Power Controller

Benefits:
• INSTANTLY reboot a router and a modem when a network connection is lost
• Reduces equipment downtime & improves productivity
• Automatically reboot network equipment BEFORE it becomes a problem
• Pays for itself with just ONE saved truck roll
• Use with any modem -- Cellular, DSL, Cable

Features:
• Remotely reboot by web browser, daily scheduling, LAN/WAN monitoring
• Dual power outlets; 100-250 VAC
• Event Logging & Notication; Sequential power reboot
• Small footprint for installation in cabinets

BADGER PART NUMBER:

IP4000
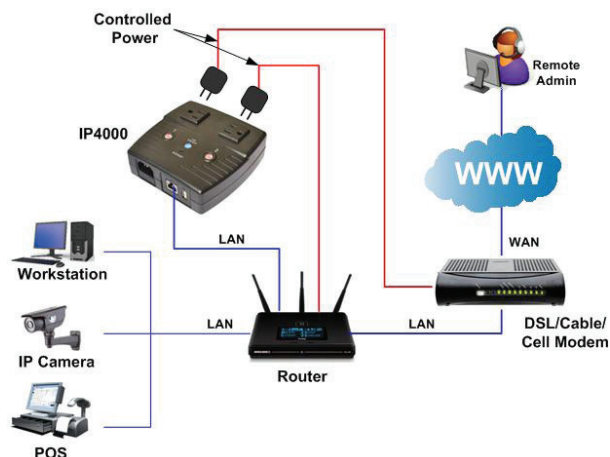
M2M CELL SIGNAL AMPLIFER

ML-CSA 3500

M2M 3G Cell Signal Amplifier w/Patented Passive Bypass

Multi-Link's Cell Signal Amplifier connects directly to any M2M enabled cellular device (mobile or fixed) and provides up to 15dB gain in uplink signal strength to lock in your data connection to cell towers.
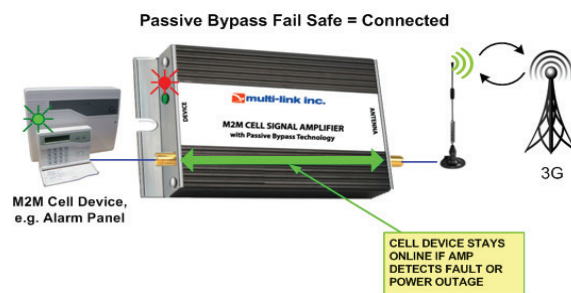
Key Benefits
• One model for both Fixed & Mobile cellular M2M applications
• Safeguard features completely eliminate any potential for disruption to the cell network
• "PASSIVE BYPASS" technology keeps cell devices connected in vital applications
• Easily connect cellular M2M devices "in-line" for fast deployment

ML-CSA 3500 Plug & Play Kit Includes: ML-CSA 3500 15dB Cell Signal Amplifier, Mag-Mount 2dBi Outdoor Antenna, AC Power Adapter Cable, Hardwire DC Power Adapter, SMA to SMA Cable Connector, User Guide

BADGER PART NUMBER:

ML-CSA 3500

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NETWORK INFRASTRUCTURE SOLUTIONS

MultiVOIP® and MultiVOIP® FX

Voice Over IP Gateways

MultiTech's voice over IP gateways bridge the voice network to the data network providing a viable alternative to traditional public switched telephone networks. These gateways provide high quality, inter-office communications solutions by seamlessly converting analog voice and fax communications for delivery over existing data networks, allowing companies to realize significant costs savings and other business benefits by leveraging a single IP network to support both voice and data.

Features:
- Ethernet connectivity and full IP compatibility with existing routers and WAN infrastructure
- PSTN failover automatically routes calls over the PSTN network if the IP network is down
- T.38 for interoperability with VoIP equipment
- Allows the use of dynamic IP addresses

MultiVOIP Family

BADGER PART NUMBER:	Description	BADGER PART NUMBER:	Description
MVP130-FXS	1-Channel Analog Adapter (FXS only)	MVP428	4-Channel Expansion Card
MVP130	1-Channel FXS/FXO/DID VoIP Gateway	MVP210-FX	2-Channel FXS/FXO SIP Gateway
MVP210	2-Channel FXS/FXO/E&M/DID VoIP Gateway	MVP410-FX	4-Channel FXS/FXO SIP Gateway
MVP410	4-Channel FXS/FXO/E&M/DID VoIP Gateway	MVP810-FX	8-Channel FXS/FXO SIP Gateway
MVP810	8-Channel FXS/FXO/E&M/DID VoIP Gateway	MVP428-FX	4-Channel Expansion Card

Extended Warranty Service Plans are available for MultiTech MultiVOIP products. Contact your 4SVYW sales representative for complete details.

Cellular Modems & Routers

MultiTech offers a comprehensive portfolio of cellular connectivity products optimized for M2M (machine-to-machine) communications. These ready-to-deploy, carrier-approved cellular modems and routers seamlessly integrate with virtually any application, and utilize standards-based GSM and CDMA technologies.

Extend your networks reach into remote sites, connect payment and inventory management systems, monitor equipment performance, event monitoring/reporting, IP security cameras, Internet access for seasonal retail or construction sites, and more. MultiTech's cellular modems and routers offer a shared design approach across all major cellular technologies, and offer a long and stable lifecycle, all important considerations for M2M/IoT applications.

Key Features and Benefits:
- 4G-LTE, 3G and 2G, GSM and CDMA technologies
- Fully certified, carrier-approved and ready-to-deploy
- Models with USB, serial, and Ethernet connectivity
- Models available with GPS connectivity
- Longer and more stable lifecycle versus consumer-grade products

Cellular Modems and Routers

BADGER PART NUMBER:	Description
MTR-LAT1-B07-US	MultiConnect® rCell LTE Router with US Accessory Kit (AT&T)
MTR-LAT1-B08-US	MultiConnect® rCell LTE Router with GPS & US Accessory Kit (AT&T)
MTR-LVW2-B07-US	MultiConnect® rCell LTE Router with US Accessory Kit (Verizon Wireless)
MTR-LVW2-B08-US	MultiConnect® rCell LTE Router with GPS & US Accessory Kit (Verizon Wireless)
MTR-H5-B07-US-EU-GB	MultiConnect® rCell HSPA+ Router with US/EU/UK Accessory Kit
MTR-H5-B10-US	MultiConnect® rCell HSPA+ Router with Wi-Fi/GPS & US Accessory Kit (AT&T)
MTR-EV3-B07-N3-US	MultiConnect® rCell EV-DO Router with US Accessory Kit (Verizon Wireless)
MTR-EV3-B10-N3-US	MultiConnect® rCell EV-DO Router with Wi-Fi/GPS & US Accessory Kit (Verizon Wireless)
MTC-H5-B01-US-EU-GB	MultiConnect® Cell HSPA+ Modem (RS-232) with US/EU/UK Accessory Kit
MTC-EV3-B01-N3-US	MultiConnect® Cell EV-DO Modem (RS-232) with US Accessory Kit (Verizon Wireless)
MTD-H5-2.0	QuickCarrier® USB-D HSPA+ USB Cellular Modem
MTD-EV3-N3	QuickCarrier® USB-D EV-DO USB Cellular Modem (Verizon Wireless)

For a complete list of cellular modem & router options, contact your 4SVYW sales representative.

View our searchable electronic catalog at: www.badgercommunications.com

FaxFinder®
IP and Analog Fax Servers

The FaxFinder® fax server is an all-in-one network attached appliance that allows faxes to be sent and received electronically. Inbound faxes are delivered to a recipient's email inbox or network folder so they can be accessed by personal computer or mobile device. They can also be queued on a network printer for customers who required printed copies. A number of routing options are available to help ensure faxes are delivered to the proper individual or department. Outbound faxes are sent using client software, web browser, or existing email client.

Benefits:
• Centralize fax operations
• Lower the cost of existing fax operations
• Comply with industry-specific initiatives
• Interoperable with Avaya and a variety of other telephone systems

Features:
• Meets information privacy and security mandates
• Super G3, V.34/33.6K fax communications

FaxFinder Family

Turnkey Solution

The FaxFinder fax server is an all-in-one network-attached appliance that includes:
• Hardware: Onboard storage and processing for sending and receiving faxes
• Client Software: Software that allows faxes to be send from an individual's PC or Mac
• Administrative Software: Controls that configure the hardware and determine how faxes are routed
• API: Allows for FaxFinder integration with third-party applications like EMR/EHR, ERP, and other systems

Network Administration and Management

As a network-attached appliance, the FaxFinder fax server includes a number of tools that help simplify the set-up and configuration process:
• Add and manage users using Active Directory
• Manage the FaxFinder remotely using SNMP
• Establish fax routing rules
• Archive inbound and outbound faxes to a shared drive
• Review server status and update firmware

Sending and Receiving Faxes

The FaxFinder fax server allows users to send and receive faxes electronically and in a variety of means based on their personal preference, department workflow, or business process. The FaxFinder also allows organizations to route inbound faxes in a number of ways, helping ensure that all inbound faxes are sent to the correct person or department.

Sending Faxes	Routing Faxes	Receiving Faxes	Recipients
Client Software. Loaded onto individual Windows or Macintosh computers. **Web Interface.** Log into FaxFinder using web browser. **Existing Email Client.** Use existing SMTP client. **Web-services API.** Integrate FaxFinder with enterprise software.	**Global Routing** sends a copy of all faxes to a defined destination. **Line Routing** is based on line or modem number. **Recipient Routing** is based on the extension number.	**Email Inbox.** Fax is attached to an email and forwarded to individual's or a group inbox. Ideal for C level executives.	**Executives** • CEO • CFO • COO
		Network Folder. Fax is placed in network shared folder.	**Departments** • Sales • Accounting • Procurement
		Network Printer. Fax is placed in the print queue and printed on a network shared printer.	**Service Organizations** • Manufacturing • Legal

BADGER PART NUMBER:	Description	BADGER PART NUMBER:	Description
FF240.R1	2-Port V.34 Analog Fax Server	**FF240-IP-UPGRADE-10**	10-Channel FF240-IP Upgrade License
FF440.R1	4-Port V.34 Analog Fax Server	**FF240-IP-UPGRADE-12**	12-Channel FF240-IP Upgrade License
FF840.R1	8-Port V.34 Analog Fax Server	**FF240-IP-UPGRADE-14**	14-Channel FF240-IP Upgrade License
FF240-IP-2.R1	2-Channel IP Fax Server (SIP/T.38) with	**FF240-IP-UPGRADE-16**	16-Channel FF240-IP Upgrade License
	US Accessory Kit (upgradeable to 24-channels)		
FF240-IP-UPGRADE-2	2-Channel FF240-IP Upgrade License	**FF240-IP-UPGRADE-18**	18-Channel FF240-IP Upgrade License
FF240-IP-UPGRADE-4	4-Channel FF240-IP Upgrade License	**FF240-IP-UPGRADE-20**	20-Channel FF240-IP Upgrade License
FF240-IP-UPGRADE-6	6-Channel FF240-IP Upgrade License	**FF240-IP-UPGRADE-22**	22-Channel FF240-IP Upgrade License
FF240-IP-UPGRADE-8	8-Channel FF240-IP Upgrade License		

Extended Warranty Service Plans are available for MultiTech FaxFinder fax servers. Contact your 4SVYW sales representative for complete details.

NETWORK INFRASTRUCTURE SOLUTIONS

NETGEAR PROSAFE® POE SWITCHES

HOME/OFFICE SWITCHES

The NETGEAR Home/Office Ethernet Unmanaged Switches provide easy and affordable network connectivity to home and small/home offices. They are easy to use and reliable. With these Plug-N-Play switches, you can expand your network connections to multiple devices instantly. These switches also support various energy saving technologies, helping you save power and money.

BADGER PART NUMBER:	Description
GS605NA	5PT GIGABIT SWITCH
GS608NA	8PT GIGABIT SWITCH

GS100 SERIES

The popular NETGEAR® ProSAFE® GS100 series desktop switches help businesses cost-effectively expand their network to Gigabit speeds and higher port counts. The GS105 and GS108 Gigabit Ethernet switches come with 5 and 8 Gigabit copper ports in a desktop metal case and is wall-mountable. These switches are energy efficient, built to last, and rigorously tested to provide the reliability businesses need. 802.1p traffic prioritization and jumbo frame support allow for seamless integration with more sophisticated networks. The GS116 Gigabit Ethernet switch comes with 16 auto-sensing 10/100/1000 Mbps Ethernet ports.

GS105E-200NAS

BADGER PART NUMBER:	Description
GS105E-200NAS	5PT Gigabit Ethernet Web Managed Switch
GS105PE-10000S	5PT PD-POWERED ONLY PoE GE Web Managed Switch W/with 2 PoE, 1 PoE+, and 2 PD PTS
GS108E-300NAS	ProSAFE® Plus 8-Port GE Web Managed Switch
GS108PE-300NAS	ProSAFE® Plus 8-Port GE PoE Web Managed Switch W/ 4 PoE PTS
GS116E-200NAS	ProSAFE® Plus 16-Port GE Web Managed Switch

PROSAFE® GIGABIT ETHERNET SMART MANAGED SWITCHES

The NETGEAR® Gigabit Ethernet Smart Managed Switches offer a comprehensive L2 feature set and enhanced performance and usability. They are purposely designed for small and medium-sized networks where reliability and performance are key, and operational cost savings and ease of management are must-haves. There are four products in this series: 26- and 50- port Gigabit Ethernet Smart Managed Switch, 28-port Fast Ethernet with 12 PoE ports and 28-port with 24 PoE ports. All switches come with dedicated Gigabit SFP ports for either Gigabit and/or fiber uplinks. These ProSAFE Fast Ethernet Smart Managed Switches from NETGEAR are the optimized solutions providing the best value at an affordable SMB price point.

FS728TLP

BADGER PART NUMBER:	Description
FS728TLP-100NAS	ProSAFE® 28-PT 10/100 GE Smart Managed Switch W/ 12 PoE PTS, 2 GE Copper plus 2 GE Copper/SFP Combo PTS
FS728TP-100NAS	ProSAFE® 28-PT 10/100 GE Smart Managed Switch W/ 24 PoE Ports, 2 GE Copper plus 2 GE Copper/SFP Combo PTS

M4100 SERIES

The NETGEAR Intelligent Edge M4100 series consists of 12 fully managed switches, ranging from 8-port Fast Ethernet to 50-port Gigabit Ethernet. They are ideal for all organizations considering reliable, affordable and simple access layer switching with CLI, advanced scripting capabilities and Layer 3 routing. As a cost-effective component of converged voice, video and data networking solutions, NETGEAR M4100 series delivers a secure edge in commercial buildings and campus LAN environments: PoE (802.3af) and PoE+ (802.3at) versions of M4100 series are perfect for Wireless access points, IP telephony and IP surveillance deployments.

GSM7224P

- High availability and PoE/PoE+ full power capability
- Industry standard management
- Industry leading warranty
- Layer 2+ with static routing
- Engineered for convergence
- High-value performance and IPv6 ready

BADGER PART NUMBER:	Description
GSM5212P-100NEW	M4100-D12G-POE+ Managed SW (12-PT, PoE+, GE, L2+)
GSM7212F-100NES	M4100-12GF Managed SW (12-PT, SFP, GE, L2+)
GSM7224P-100NEW	M4100-24G-POE+ Managed SW (24-PT, POE+, GE, L2+)

NETWORK INFRASTRUCTURE SOLUTIONS

NETWORK INFRASTRUCTURE SOLUTIONS

WARRANTY AND SUPPORT:
• NETGEAR® ProSAFE® Lifetime Hardware Warranty.
• Included Lifetime Technical Support.
• Included Lifetime Next Business Day Hardware Replacement.

FULLY MANAGED SWITCHES

NETGEAR ProSAFE® Fully Managed Switches connect end-users, critical services, servers and storage across flexible core, distribution and access layers. Our Managed Infrastructure combine latest advances in hardware and software engineering for higher flexibility, lower complexity and stronger investment protection. A single-pane-of-glass management platform – NMS300 – increases overall operational efficiency.

BADGER PART NUMBER:	Description
XSM4316S-100NES	M4300-8X8F MANAGED SWITCH
XSM4324CS-100NES	M4300-24X MANAGED SWITCH

SMART MANAGED SWITCHES

NETGEAR ProSAFE® Smart Managed Switches are purposely designed for SMB customers with high performance, SMB-oriented features and easy management - enabling SMB networks to support Voice over IP (VoIP), streaming media, multicasting, security, and many other bandwidth-intensive applications.

BADGER PART NUMBER:	Description
GS724T-400NAS	24PT GIGABIT SMART SWITCH
GS728TP-100NAS	28PT GE POE SMART SWITCH
XS716T-100NES	16PT 10G SMART MANAGED SWITCH

WEB MANAGED (PLUS) SWITCHES

NETGEAR ProSAFE® 2nd Generation 10-Gigabit Web Managed (Plus) Switches are once again breaking down price barriers throughout the industry providing the most cost-effective 10-Gigabit copper switching solution available to SMBs, workgroups, and even home users today. These switches offer full 10GBASE-T connectivity while allowing added intelligence through essential L2 network features. New easy-to-use web browser-based management GUI makes advanced setup simple, on top of plug-and-play connectivity.

BADGER PART NUMBER:	Description
GS116E-200NAS	16PT GIGABIT PLUS SWITCH
JGS524PE-100NAS	24PT GE POE PLUS SWITCH
XS708E-200NES	8PT PROSAFE 10G PLUS SWITCH

UNMANAGED SWITCHES

The NETGEAR ProSAFE® Gigabit Ethernet Unmanaged Switch series offers a wide range of models for different network deployment requirements. These energy efficient switches are well built and rigorously tested to provide the reliability businesses need. 802.1p traffic prioritization and jumbo frame support allow for seamless integration with more sophisticated networks.

BADGER PART NUMBER:	Description
GS105NA	5PT COPPER GIGABIT SWITCH
GS108-400NAS	8PT COPPER GIGABIT SWITCH
JGS516NA	16PT GIGABIT SWITCH

BUSINESS CENTRAL

Business Central is a secure, cloud based IT service platform designed to provide small to mid-sized organizations with an affordable way to establish, provision and manage key IT networking services. Effortlessly. As a Software-as-a-Service (SaaS) platform, Business Central provides enterprise-grade service levels with sophisticated client load balancing and redundancy to ensure maximum uptime while minimizing capital cost expenditures.

One View. Multiple Possibilities

Using a single portal dashboard, bring multiple sites, access points and users under one management umbrella within minutes. Manage wireless SSIDs, control applications being used on your network, and run bandwidth usage reports with a few clicks. Achieve full visibility of your network with real-time alerts to keep you in total control of evolving service needs from day one.

Wireless Management In-Tune to your IT Budget

Wireless Manager eliminates the need for onsite hardware based Wireless Controllers. The purchase, update, support renewal, and maintenance of a separate controller is not required. Reduce capital costs, achieve faster deployments and benefit from easy access to a range of configuration management and reporting tools. When needed, add extra capacity to suit - whilst maintaining a fully balanced and capable network.

Free time. Fee time

Try Wireless Manager free for 90 days. Getting started with Wireless Manager is as easy as 1-2-3. Simply sign up to a new account today to get free access for 90 days, select your compatible ProSAFE® Access Point(s) and upload cloud firmware (if required) and connect! There are no commitment or contracts to sign - allowing you to try before you buy. For your users, offer free and / or chargeable access. For service oriented organizations, Wireless Manager is perfect for delivering value based free Internet access for an hour as an example, after which users can take advantage of premium based fee paying services.

Flexibility

Your network is unique. Allowing it to grow, flex and change to meet evolving needs is fully supported with Wireless Manager. Manage single APs at a handful of sites, hundreds at one location, or manage thousands of APs across multiple sites. Following your trial, ongoing service can be activated through purchase of one or more token licenses from an authorized NETGEAR reseller. They can assist in helping you select the most appropriate license to suit your duration needs and number of APs deployed.

Key Features

• Centralized management of multiple branches deployment of large quantities for one or multiple customers
• Supports upwards of 200,000 access points
• Automatic channel distribution to minimize interferences
• Auto-channel allocation taking into consideration of the environment, interferences, traffic load and neighboring AP
• Supported Access Points: WNDAP660, WNDAP350, WNDAP360, WNAP320, WNAP210v2

BADGER PART NUMBER:	Description
WM10AP1YL-10000S	CLOUD WLESS MGMT 10 AP 12 MONTHS
WM10AP3YL-10000S	CLOUD WLESS MGMT 10 AP 36 MONTHS
WM1AP1YL-10000S	CLOUD WLESS MGMT 1 AP 12 MONTHS
WM1AP3YL-10000S	CLOUD WLESS MGMT 1 AP 36 MONTHS
WM50AP1YL-10000S	CLOUD WLESS MGMT 50 AP 12 MONTHS
WM50AP3YL-10000S	CLOUD WLESS MGMT 50 AP 36 MONTHS

BUSINESS CENTRAL

NETWORK INFRASTRUCTURE SOLUTIONS

NETWORK INFRASTRUCTURE SOLUTIONS

M4300 SERIES

The NETGEAR M4300 Stackable Switch Series delivers L2/L3/L4 and IPv4/IPv6 cost-effective services for mid-enterprise edge with full PoE+ and SMBcore deployments with unrivalled ease of use: 10 Gigabit models can seamlessly stack with 1 Gigabit models within the series, enabling spine and leaf line-rate stacking topologies. Non-stop forwarding (NSF) virtual chassis architectures provide advanced High Availability (HA) with hitless failover across the stack. Perfect for wireless access, unified communications and IP video, the NETGEAR M4300 Switch Series is also ready for the future, with Software-defined Network (SDN) and OpenFlow 1.3 enabled for your network.

XSM4324CS-100NES

BADGER PART NUMBER:	Description
XSM43165S-100NES	M4300-8X8F Stackable Managed SW W 16x10G INCL 8x10GBASE-T and 8xSFP+ Layer 3 (XSM4316S)
XSM4324S-100NES	M4300-12X12F Stackable Managed Switch with 24x10G including 12x10GBASE-T and 12xSFP+ Layer 3 (XSM4324S)
XSM4324CS-100NES	M4300-24X 24X 10GBASE-T 4x Half-Width Stackable SW

GIGABIT WEB MANAGED SWITCH SERIES

Today's growing businesses demand and rely more on their network to carry out mission-critical business activities. Companies are putting more network traffic and applications such as VoIP phones and IP cameras on their Ethernet infrastructure. It needs the network intelligence to separate the voice and video traffic from data, and prioritize them accordingly. However, companies do not necessarily have more money or advanced training to deal with complex managed switches. NETGEAR ProSAFE® Plus Switches meet this growing need by providing fundamental network features that will help optimize the performance of business networks. On top of the plug-N-play Gigabit Ethernet connectivity, these switches also offer essential networking features such as VLAN, QoS, IGMP Snooping, Link Aggregation (LAG) on models with 16 ports or more, rate limiting and traffic monitoring. NETGEAR ProSAFE® Plus Switches are an exceptional value for businesses looking to add intelligence to their network beyond what unmanaged switches can provide.

- ProSAFE Plus Switch delivers network monitoring, traffic prioritization and VLAN
- Up to 24 ports (depending on model) deliver up to 2000 Mbps of dedicated, non-blocking bandwidth per port
- Simple, yet useful network set-up on top of plug-and-play connectivity
- Gigabit speed with QoS, VLAN and network monitoring
- VLAN support for traffic segmentation
- Quality of Service (QoS) for traffic prioritization
- Auto "denial-of-service" (DoS) prevention
- Troubleshoot connection issues via cable test

BADGER PART NUMBER:	Description
GS105PE-10000S	5PT GIGABIT POE/PD PLUS SWITCH
GS108PE-300NAS	8PT GE POE PLUS SWITCH

GS105PE

GS108PE

STANDALONE SMART SWITCH SERIES

NETGEAR Smart Switches offer powerful L2 and L2+ features, better PoE functionality, and enhanced performance and usability. They are purposely designed for converged networks where voice, video, data are all carried on a single network platform. These switches are optimized for network efficiency, operational cost savings, and ease of management. This series of switches offers 8 to 52 port configurations both in Fast Ethernet and Gigabit Ethernet with PoE options. All switches come with Gigabit SFP ports for fiber connectivity. These switches are the ideal solution for businesses looking for the best combination of features, performance, and value.

- 801.2x Flow Control
- Auto Video VLAN (selected models)
- IEEE802.1D, IEEE802.1w RSTP and MSTP
- Static routing with 32 static routes (Selected models)
- Jumbo frame support
- Lifetime warranty and 24x7 Support where available

BADGER PART NUMBER:	Description
GS110TP-200NAS	10PT GE POE SMART SWITCH
GS510TP-100NAS	8PT GE SMART SWCH 2SFP MAX POE
GS516TP-100NAS	16PT GE POE SMART SWITCH
GS728TP-100NAS	28PT GE POE SMART SWITCH
GS728TPP-100NAS	28PT GE POE+ SMART SWITCH
GS728TXP-100NES	S3300 28PT STKBL POE SMART SW W/10G
GS752TP-100NAS	52PT GE POE SMART SWITCH
GS752TPSB-100NAS	52PT GE STACKABLE SMART SWITCH BNDL
GS752TSB-100NAS	52PT STACKABLE SMART SW BNDL
GS752TXP-100NES	S3300 52PT STKBL POE SMART SW W/10G

GS110TP

GS510TP

GS516TP

GS728TP/ GS728TPP

GS728TXP

GS752TP

NETGEAR®

INDUSTRY'S FIRST SMB SWITCH WITH 10-GIGABIT CONNECTIVITY

As a leading provider of network equipment for SMBs, NETGEAR understands the importance of a reliable and high performance network to SMB customers. With the growth of virtualization, cloud-based services and applications like VoIP, video streaming and IP surveillance, SMB networks need to extend beyond simple reliability to higher speed and performance. The 10G Smart Managed Switch series from NETGEAR presents the right solution for this requirement; delivering unprecedented non-blocking 10-Gigabit bandwidth at an affordable cost.

NETGEAR's ProSAFE® XS712T and ProSAFE® XS728T are powerful Smart Managed Switches that come with either 12 or 24 10-Gigabit Copper ports and either 2 Combo SFP+ (XS712T) or 4 additional Dedicated SFP+ ports (XS728T) for 10G Fiber links. NETGEAR's 10G Smart Managed Switches are purposely designed as a cost-effective way to provide 10G connections to 10G-capable servers and NAS (Network Attached Storage) systems. They can be used at the "center of a small business network" or as an aggregation / access switch in a larger organization including workgroup access, connecting to a 10G NETGEAR ProSAFE® M7100/M7300 Fully Managed Switch on one end and extending the 10G connections to the edge.

Comprehensive L2+/Layer 3 Lite Features
• Advanced VLAN features such as Protocol-based VLAN, MAC-based (Media Access Control) VLAN and 802.1x Guest VLAN
• Advanced QoS (Quality of Service) with L2/L3/L4 awareness and 8 priority queues including Q-in-Q
• Static Routing (including IPv6 on XS728T)
• Private VLAN
• Dynamic VLAN assignment
• IGMP and MLD snooping
• Advanced Security
• IPv6 for management, QoS and ACL

10-Gigabit Transition with Base-T
• 10GBase-T, like other Base-T technologies, uses the standard RJ-45 Ethernet jack
• It is backward compatible, auto-negotiating between higher and lower speeds – thereby not forcing an all-at-once network equipment upgrade
• CAT5/CAT5E are supported for Gigabit speeds up to 100 meters
• CAT6 twisted pair copper cabling supports 10-Gigabit speeds up to 45 meters
• CAT6A or newer CAT7 cabling will allow for up to 100 meter 10GBase-T connections

Designed as a Core Switch for SMB Networks
• 10G connection to 10G-capable servers and network storage
• Powerful L2+/Layer 3 Lite features make them the most cost-effective core switches for SMB and virtualization environment
• Future-proof your network with 10G bandwidth, advanced traffic management and comprehensive IPv6 support
• Static routing helps to route internal traffic for more efficient use of network resources
• IGMP and MLD snooping provide advanced multicast filtering

BADGER PART NUMBER:	Description
XS708E-100NES	8PT 10G PLUS SWITCH
XS712T-100NES	12PT 10G SMART SWITCH
XS728T-100NES	28PT 10G SMART SWITCH W/4 SFP+

XS708E

XS712T

XS728T

NETWORK INFRASTRUCTURE SOLUTIONS

M6100 CHASSIS
Campus Edge and SMB Core Chassis Switches

The NETGEAR® Chassis M6100 series delivers L2/L3/L4 and IPv4/IPv6 rich services for enterprise edge and SMB core deployments, as well as 1G / 10G mixed infrastructures in server rooms. Innovative distributed fabric provides non-stop forwarding resiliency and world-class availability - including passive backplane, hitless failover, redundant fabric and redundant management - without having to pay the exorbitant acquisition and maintenance costs associated by other networking vendors in this class.

Key features

- Proficient access layer in campus LAN networks, and competent distribution or core layer for midsize organizations networks
- Advanced Layer 2, Layer 3 and Layer 4 feature set - no license required - including PBR, BGP, DCBX, PFC, ETS and FCoE FIP
- 1.4 Tbps switching and routing capacity, passive backplane, management and fabric nonstop forwarding redundancy
- Up to 144 (Gigabit) ports, or 72 (10 Gigabit) ports, or a combination of both in dense form factor models
- PoE+ (30 watts per port) and UPOE (60 watts per port) modular, flexible implementation
- Ultra-low latency and scalable table size with 32K MAC, 8K ARP/NDP, 4K VLANs, 12K routes

PoE and UPOE

- Any Gigabit copper blade can receive PoE+ or UPOE daughter cards for easy upgrade / downgrade and best investment protection
- Up to 3,000W PoE budget is provided by internal power supplies when 6,000W are available with additional 1U power shelf
- All set for rapid proliferation of PoE/PoE+ devices, such as IP telephony endpoints, 802.11n / 802.11ac access points and IP security cameras
- Future-proof 60W UPOE power delivered to next-gen VDI clients or physical security devices; UPOE is backward compatible with PoE/PoE+

NETGEAR Warranty

- This product is backed by a NETGEAR ProSAFE® Lifetime Hardware Warranty.
- Lifetime Next Business Day Hardware Replacement.
- ProSUPPORT 24x7 Advanced Technical Support via phone for 90 days (Remote diagnostics performed by our technical experts for prompt resolution of technical issues). ProSUPPORT coverage can be extended by purchasing one, three, or five year contracts.
- ProSUPPORT Lifetime 24x7 Advanced Technical Support via chat. (Remote diagnostics performed by our technical experts for prompt resolution of technical issues).

BADGER PART NUMBER:	Description
XCM8903SF-10000S	M6100-44GF3 STARTER KIT BNDL
XCM8903SK-10000S	M6100-44G3-POE+ STARTER KIT BNDL
XCM8903SX-10000S	M6100-24X3 STARTER KIT BNDL
XCM8924X-10000S	M6100 MODULE 24X10GB-T 16XSFP+
XCM8944-10000S	M6100 MODULE 40X1G AND 4X10G
XCM8944F-10000S	M6100 MODULE 40XSFP AND 4X10G
XCM8948-10000S	M6100 MODULE 48X1G
XCM89P-10000S	M6100 POE+ DAUGHTER CARD
XCM89UP-10000S	M6100 UPOE DAUGHTER CARD
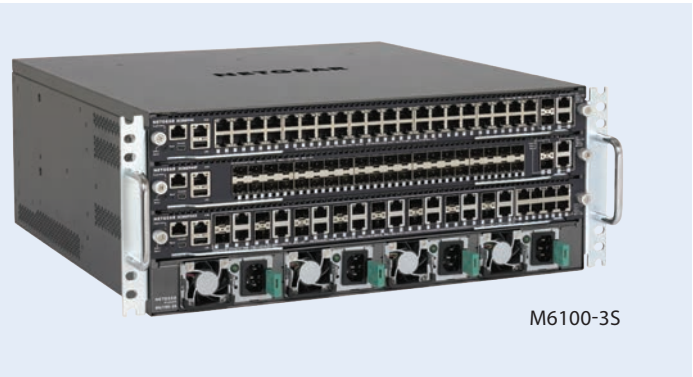
M6100-3S

Wall & Hard Ceiling WAP Mounting Solutions: Surface Mount Enclosures

Oberon's non-metallic WAP enclosures are ideal for locking up the WAP. These enclosures are made from an impact-resistant, UL classified, plastic. This material is virtually transparent to wireless signals.

BADGER PART NUMBER:

0900-00	Surface Wall Mount Box for Wireless Access Points
0900-HC	Hanging Conduit or Pendant Mount Box for WAPs
1013-00	2-Axis Articulating WAP/Antenna Mount
1013-COVER	2-Axis Articulating WAP/Antenna Mount: White cover
1014-00	1-Axis Articulating WAP/Antenna Mount: White cover
1015-00	11" ABS WAP Lock-box: Solid door
1015-C	11" ABS WAP Lock-box: T-bar, Translucent door
1016-00	18" ABS WAP Lock-box: Solid door
1016-C	18" ABS WAP Lock-box: T-bar, Translucent door
1017-BL	Small Wall Mount WAP Protective Non-Metallic Box
1017-WH	Small Wall Mount WAP Protective Non-Metallic Box
1018-WH	Wall Mount, Polycarbonate Wireless AP Enclosure
1030-00	Steel Surface Mount WAP Wall Enclosure - ABS dome

Model 900-00

Wall & Hard Ceiling WAP Mounting Solutions: Recess Mounts

These enclosures are designed to permit convenient and secure mounting of the access point on walls or in rooms with a hard "lid" or ceiling. The enclosures include a universal mounting plate for access points from many vendors, "keyed alike" locks, and knockouts for antennas, which can either protrude through the enclosure or can be installed as bulkhead kits. Most of Oberon's ceiling mounts and enclosures are UL Listed and carry an OPA number.

BADGER PART NUMBER:

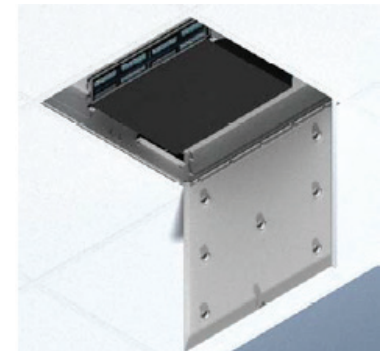|	
1042-AP205	Recessed Ceiling WAP Install Kit - Old construction
1042-AP215	Recessed Ceiling WAP Install Kit - Old construction
1042-AP225	Recessed Ceiling WAP Install Kit - Old construction
1042-AP325	Recessed Ceiling WAP Install Kit - Old construction
1042-CCOAP	Recessed Ceiling WAP Install Kit - Old construction
1042-CCOAP3800	Recessed Ceiling WAP Install Kit - Old construction
1043-AP205	Recessed Ceiling WAP Install Kit - New construction
1043-AP215	Recessed Ceiling WAP Install Kit - New construction
1043-AP225	Recessed Ceiling WAP Install Kit - New construction
1043-AP325	Recessed Ceiling WAP Install Kit - New construction
1043-CCOAP	Recessed Ceiling WAP Install Kit - New construction
1043-CCOAP3800	Recessed Ceiling WAP Install Kit - New construction
1051-00	Recessed Ceiling/Wall WAP Mount
1051-AP225	Recessed Ceiling/Wall WAP Mount - Aruba WAPs
1051-CCOAP	Recessed Ceiling/Wall WAP Mount - Cisco WAPs
1051-WA	Recessed Ceiling/Wall WAP Mount - ABS door dome
1065-CCOAP	Hard Ceiling Locking Mount - Cisco WAPs
1076-AP205	3" deep Recessed WAP Wall Mount - Aruba AP205
1076-AP215	3" deep Recessed WAP Wall Mount - Aruba AP215
1076-AP225	3" deep Recessed WAP Wall Mount - Aruba AP225
1076-AP325	3" deep Recessed WAP Wall Mount - Aruba AP325
1076-CCOAP	3" deep Recessed WAP Wall Mount - Cisco WAP
1076-CP	3" deep Recessed WAP Wall Mount - Clear dome
1076-WA	3" deep Recessed WAP Wall Mount - White ABS dome

Model 1042-CCOAP3800

Suspended Ceiling WAP Mounting Solutions - Zone & A/V Enclosures

The suspended ceiling tile enclosures are designed to replace standard 2' x 2' ceiling tiles in an acoustical, drop ceiling environment. The ceiling enclosure is a convenient and secure method of mounting a switch or other rack mountable networking components. These enclosures are ideal for Fiber to the Enclosure (FTTE) structured cabling design. The ceiling enclosures satisfy National Electric Code paragraphs 300-22 and 300-23 for installations in the air-handling space (or "plenum" space). Most Oberon ceiling enclosures are UL50 Listed and carry an OPA number.

BADGER PART NUMBER:

1028-04-ANT5-B	Aluminum NEMA4 WAP Enclosure: 4" deep Recessed
1028-04-ANT5-F	Aluminum NEMA4 WAP Enclosure: 4" deep Suspended ceiling
1028-08-ANT5-B	Aluminum NEMA4 WAP Enclosure: 8" deep Recessed
1028-08-ANT5-F	Aluminum NEMA4 WAP Enclosure: 8" deep Suspended ceiling
1074-04-ANT7	2U Suspended Ceiling Zone Enclosure - Up to 7 antennas
1074-04-VENT	3U Suspended Ceiling Zone Enclosure - Ventilated, beveled
1074-06-ANT7	3U Suspended Ceiling Zone Enclosure - Up to 7 antennas
1074-06-VENT	4U Suspended Ceiling Zone Enclosure - Ventilated, beveled

Model 1074-04-ANT7

NETWORK INFRASTRUCTURE SOLUTIONS

NETWORK INFRASTRUCTURE SOLUTIONS

Since 1999, Oberon, Inc. has been providing products and services to integrators and end users of wireless LAN WiFi network products. Oberon's wireless enclosures and antenna products are used where the RF coverage, infrastructure security, environmental robustness, and aesthetics are paramount in the network design and implementation. Oberon offers ceiling-mounted telecommunications enclosures for Ethernet switches, patch panels, wireless controllers, and other networking and A/V components - ideal for structured cabling and Fiber-to-the-Enclosure (FTTE) deployments.

Oberon's products and services have helped thousands of integrators and end-users in the global healthcare, government, transportation and logistics, education, retail, hospitality, and manufacturing achieve reliable indoor network connection mobility.

Suspended Ceiling Wireless Access Point Enclosures with Doors

The suspended ceiling tile enclosures replace standard 2' x 2' ceiling tiles in an acoustical, drop ceiling environment. The access point can be accessed without disturbing the air-handling space, and antennas can be mounted on the door of the enclosure to provide ideal radiation patterns. The ceiling enclosures are designed to satisfy National Electric Code paragraphs 300-22 and 300-23 for installations in the airhandling space (sometimes called the "plenum" space). Most of Oberon's mounts and enclosures are UL Listed and carry an OPA number.

BADGER PART NUMBER:
1046 Series   2' x 2' Ceiling Enclosure; 3" Deep Back-Box; AP Mounts in Quick-Release, Locking Door
1047 Series   2' x 2' Ceiling Enclosure; 3" Deep; Larger Back-Box; AP Mounts in Quick-Release, Locking Door
1052 Series   2' x 2' Ceiling Enclosure; 4.5" Deep Back-Box; AP Mounts in Box or Locking Door
1075 Series   Ceiling Enclosure; 3" Deep Back-Box; AP Mounts in Box or Locking Door
1077 Series   2' x 2' Ceiling Enclosure; 3" Deep Back-Box; AP Mounts in Box or Locking Door

Model 1047

Suspended Ceiling Wireless Access Point Mounts

The suspended ceiling tile mounts replace standard 2' x 2' ceiling tiles in an acoustical, drop ceiling environment. The access point can be accessed without disturbing the air-handling space, and antennas can be mounted on the door of the enclosure to provide ideal radiation patterns. The ceiling enclosures are designed to satisfy National Electric Code paragraphs 300-22 and 300-23 for installations in the airhandling space (sometimes called the "plenum" space). Most of Oberon's mounts and enclosures are UL Listed and carry an OPA number.

BADGER PART NUMBER:
1040 Series   Economical AP Recessed Ceiling Mounts
1044 Series   Economical AP Recessed Ceiling Mounts with 3" Deep Back-Box
1045 Series   Economical Above-Ceiling AP Mounts for Suspended Ceilings
1064 Series   2' x 2' Locking Ceiling Mounts for Cisco APs
1068 Series   2' x 2' Locking Ceiling Mounts for Aruba APs

Model 1040-CCOAP3800

Indoor/Outdoor NEMA - WiFi Enclosures

These enclosures are designed to permit convenient and secure mounting of the access point in difficult or outdoor environments. Some of these enclosures include a universal mounting plate for access points from many vendors, "keyed alike" locks, and egress points for bulkhead mounted antennas and conduit. The enclosures are designed to the UL50 standard for enclosure integrity. With proper egress point seals, the enclosures are NEMA 4 compliant for water and dust resistance.

BADGER PART NUMBER:
1020 Series   NEMA 4 Enclosures; Screw-On Cover; Compact; for APs with Internal Antennas
1024 Series   NEMA 4 Enclosures; Hinged Door; for APs with External Antennas
1026 Series   NEMA 4 Enclosures; Hinged Door; Multiple Sizes
1028 Series   Plenum-Rated NEMA 4 AP Enclosure; Ceiling Mount
3000 Series   Outdoor & Entertainment Venues

Model 1020-00

Wall & Hard Ceiling WAP Mounting Solutions: Right-Angle Brackets

Oberon right-angle WAP brackets permit wireless access points to be installed in the recommended horizontal orientation from the wall when ceiling mounting is not possible or convenient. Secure WAPs on walls, pillars, beams and other structures in the preferred horizontal orientation for optimal wireless coverage and performance.

BADGER PART NUMBER:
1006-AP225   Right-Angle WAP Wall Bracket for Aruba AP225
1006-AP325   Right-Angle WAP Wall Bracket for Aruba AP325
1006-CCOAP   Right-Angle WAP Wall Bracket for Cisco APs
1006-CCOAP3800   Right-Angle WAP Wall Bracket for Cisco 2800/3800 Series APs
1006-EX3935   Right-Angle WAP Wall Bracket for Extreme APs
1006-HLA   Right-Angle WAP Wall Bracket for Cisco AP with Hyperlocation Antenna
1008-AP3800-COVER Right-Angle WAP Wall Bracket with Black Vanity Cover for Cisco 2800/3800 Series APs
1008-HLA-COVER   Right-Angle WAP Wall Bracket with Black Vanity Cover for Cisco AP and Hyperlocation Antenna
1008-MR-COVER   Right-Angle WAP Wall Bracket with Black Vanity Cover for Meraki 32, 34, and 42 Series APs
1008-WAP-COVER   Right-Angle WAP Wall Bracket with Black Vanity Cover for Cisco, Aruba, and Other Vendors' APs
1009-00   Economy Universal Right-Angle WAP Wall Bracket: White
1010-00   Right-Angle WAP Mount with Universal T-bar Bracket, No Cover
1011-00   Right-Angle WAP Mount with Universal T-bar Bracket and Cover
1012-00   Right-Angle WAP Mount with Universal T-bar Bracket and Locking Cover

Model 1006-CCOAP3800

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715-672-4200
The Badger Communications team is available Monday-Friday 8am-4:30pm.

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The Badger Support Team will help you understand which hardware and software your Avaya systems need to ensure your customer has the features they need.

Save time and headache on your next install by having the Badger team pre-program your next Avaya system.

TRAINING

Choose our introductory classes to refresh or take your first steps into the world of Avaya and IP Office.

You can even sell an IP Office and program it during training at Badger.

NETWORK INFRASTRUCTURE SOLUTIONS

Veloso™ is a exclusive brand of high performance optics and connectivity solutions value-priced for above average margin opportunities. Solutions consist of transceivers and high speed cabling for network connectivity, server connectivity, and Fibre Channel connectivity for most OEM brands. Other products available consist of network interface cards, Media Converters, and Multiplexers. Each product is system-specific qualified and 100% tested before delivery and that's why Veloso™ has less than a .03% failure rate - one of the best in the industry! Custom solutions such as dual OEM cables, extra-long reaches, bi-directional and DWDM are available.
All optics parts come with a lifetime warranty.

Transceivers

Veloso™ supplies OEM compatible transceivers from Adtran to Zyxel. Our transceivers seamlessly scale any network, while offering quality that exceeds the OEM. Transceivers help expand network reach, increase bandwidth, and improve network performance – ALL without voiding SmartNet® or any other SLA.

BADGER PART NUMBER:	Description
10301-VEL	Veloso Extreme Networks 10301 Compatible 10GBase-SR SFP+ Transceiver (MMF, 850nm, 300m, LC)
10302-VEL	Veloso Extreme Networks 10302 Compatible 10GBase-LR SFP+ Transceiver (SMF, 1310nm, 10km, LC)
10303-VEL	Veloso Extreme Networks 10303 Compatible 10GBase-LRM SFP+ Transceiver (MMF, 1310nm, 220m, LC)
10052-VEL	Veloso Extreme Networks 10052 Compatible 1000Base-LX SFP Transceiver (SMF, 1310nm, 10km, LC)
10G-SFPP-LR-VEL	Veloso Brocade® 10G-SFPP-LR Compatible 10GBase-LR SFP+ Transceiver (SMF, 1310nm, 10km, LC, DOM)
10G-SFPP-SR-VEL	Veloso Brocade® 10G-SFPP-SR Compatible 10GBase-SR SFP+ Transceiver (MMF, 850nm, 300m, LC, DOM)
320-2881-VEL	Veloso Dell® 320-2881 Compatible 1000Base-SX SFP Transceiver (MMF, 850nm, 550m, LC)
331-5308-VEL	Veloso Dell® 331-5308 Compatible 1000Base-SX SFP Transceiver (MMF, 850nm, 550m, LC, DOM)
331-5311-VEL	Veloso Dell® 331-5311 Compatible 10GBase-SR SFP+ Transceiver (MMF, 850nm, 300m, LC, DOM)
453154-B21-VEL	Veloso HP® 453154-B21 Compatible 1000Base-TX SFP Transceiver (Copper, 100m, RJ-45)
455883-B21-VEL	Veloso HP® 455883-B21 Compatible 10GBase-SR SFP+ Transceiver (MMF, 850nm, 300m, LC, DOM)
46C3447-VEL	Veloso IBM® 46C3447 Compatible 10GBase-SR SFP+ Transceiver (MMF, 850nm, 300m, LC, DOM)
AA1419049-E6-VEL	Veloso Avaya/Nortel® AA1419049-E6 Compatible 1000Base-LX SFP Transceiver (SMF, 1310nm, 10km, LC, DOM)
AGM731F-VEL	Veloso Netgear® AGM731F Compatible 1000Base-SX SFP Transceiver (MMF, 850nm, 550m, LC)
AGM732F-VEL	Veloso Netgear® AGM732F Compatible 1000Base-LX SFP Transceiver (SMF, 1310nm, 10km, LC)
AR-SFP-1G-T-VEL	Veloso Arista Networks® SFP-1G-T Compatible 1000Base-TX SFP Transceiver (Copper, 100m, RJ-45)
AR-SFP-10G-SR-VEL	Veloso Arista Networks® SFP-10G-SR Compatible 10GBase-SR SFP+ Transceiver (MMF, 850nm, 300m, LC, DOM)
DS-SFP-FC8G-LW-VEL	Veloso Cisco® DS-SFP-FC8G-LW Compatible 2/4/8Gbs Fiber Channel LW SFP+ Transceiver (SMF, 1310nm, 10km, LC)
DS-SFP-FC8G-SW-VEL	Veloso Cisco® DS-SFP-FC8G-SW Compatible 2/4/8Gbs Fiber Channel SW SFP+ Transceiver (MMF, 850nm, 150m, LC)
E1MG-SX-OM-VEL	Veloso Brocade® E1MG-SX-OM Compatible 1000Base-SX SFP Transceiver (MMF, 850nm, 550m, LC, DOM)
E1MG-TX-VEL	Veloso Brocade® E1MG-TX Compatible 1000Base-TX SFP Transceiver (Copper, 100m, RJ-45)
E10GSFPLR-VEL	Veloso Intel® E10GSFPLR Compatible 10GBase-LR SFP+ Transceiver (SMF, 1310nm, 10km, LC, DOM)
E10GSFPSR-VEL	Veloso Intel® E10GSFPSR Compatible 10GBase-SR SFP+ Transceiver (MMF, 850nm, 300m, LC, DOM)
EX-SFP-1GE-LX-VEL	Veloso Juniper Networks® EX-SFP-1GE-LX Compatible 1000Base-LX SFP Transceiver (SMF, 1310nm, 10km, LC, DOM)
EX-SFP-10GE-LR-VEL	Veloso Juniper Networks® EX-SFP-10GE-LR Compatible 10GBase-LR SFP+ Transceiver (SMF, 1310nm, 10km, LC, DOM)
EX-SFP-10GE-SR-VEL	Veloso Juniper Networks® EX-SFP-10GE-SR Compatible 10GBase-SR SFP+ Transceiver (MMF, 850nm, 300m, LC, DOM)
EX-SFP-1GE-SX-VEL	Veloso Juniper Networks® EX-SFP-1GE-SX Compatible 1000Base-SX SFP Transceiver (MMF, 850nm, 550m, LC)
EX-SFP-1GE-T-VEL	Veloso Juniper Networks® EX-SFP-1GE-T Compatible 1000Base-TX SFP Transceiver (Copper, 100m, RJ-45)
FCLF-8521-3-VEL	Veloso Finisar® FCLF-8521-3 Compatible 1000Base-TX SFP Transceiver (Copper, 100m, RJ-45)
FTLF8519P2BNL-VEL	Veloso Finisar® FTLF8519P2BNL Compatible 1000Base-SX SFP Transceiver (MMF, 850nm, 550m, LC)
FTLF8519P3BNL-VEL	Veloso Finisar® FTLF8519P3BNL Compatible 1000Base-SX SFP Transceiver (MMF, 850nm, 550m, LC, DOM)
FTLF8528P3BCV-VEL	Veloso Finisar® FTLF8528P3BCV Compatible 2/4/8Gbs Fiber Channel SW SFP+ Transceiver (MMF, 850nm, 300m, LC)
FTLX1471D3BCL-VEL	Veloso Finisar® FTLX1471D3BCL Compatible 10GBase-SR SFP+ Transceiver (MMF, 850nm, 300m, LC, DOM)
FTLX8571D3BCL-VEL	Veloso Finisar® FTLX8571D3BCL Compatible 10GBase-SR SFP+ Transceiver (MMF, 850nm, 300m, LC, DOM)
FTLX8571D3BCV-VEL	Veloso Finisar® FTLX8571D3BCV Compatible 10GBase-SR SFP+ Transceiver (MMF, 850nm, 300m, LC, DOM)
FTLX8573D3BTL-VEL	Veloso Finisar® FTLX8573D3BTL Compatible 10GBase-SR SFP+ Transceiver (MMF, 850nm, 300m, LC, DOM)
GLC-BX-D-VEL	Veloso Cisco® GLC-BX-D Compatible 1000Base-BX SFP Transceiver (SMF, 1490nmTx/1310nmRx, 10km, LC, DOM)
GLC-GE-100FX-VEL	Veloso Cisco® GLC-GE-100FX Compatible 100Base-FX SFP Transceiver (MMF, 1310nm, 2km, LC)

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BADGER PART NUMBER:	Description
GLC-FE-100FX-RGD-VEL	Veloso Cisco® GLC-FE-100FX-RGD Compatible 100Base-FX SFP Transceiver (MMF, 1310nm, 2km, LC, Rugged)
GLC-FE-100FX-VEL	Veloso Cisco® GLC-FE-100FX Compatible 100Base-FX SFP Transceiver (MMF, 1310nm, 2km, LC)
GLC-FE-100LX-RGD-VEL	Veloso Cisco® GLC-FE-100LX-RGD Compatible 100Base-LX SFP Transceiver (SMF, 1310nm, 10km, LC, Rugged)
GLC-FE-100LX-VEL	Veloso Cisco® GLC-FE-100LX Compatible 100Base-LX SFP Transceiver (SMF, 1310nm, 10km, LC)
GLC-ZX-SMD-VEL	Veloso Cisco® GLC-ZX-SMD Compatible 1000Base-ZX SFP Transceiver (SMF, 1550nm, 80km, LC, DOM)
GLC-LH-SM-VEL	Veloso Cisco® GLC-LH-SM Compatible 1000Base-LX SFP Transceiver (SMF, 1310nm, 10km, LC)
GLC-LH-SMD-VEL	Veloso Cisco® GLC-LH-SMD Compatible 1000Base-LX SFP Transceiver (SMF, 1310nm, 10km, LC, DOM)
GLC-LX-SM-RGD-VEL	Veloso Cisco® GLC-LX-SM-RGD Compatible 1000Base-LX SFP Transceiver (SMF, 1310nm, 10km, LC, DOM, Rugged)
GLC-SX-MM-VEL	Veloso Cisco® GLC-SX-MM Compatible 1000Base-SX SFP Transceiver (MMF, 850nm, 550m, LC)
GLC-SX-MMD-VEL	Veloso Cisco® GLC-SX-MMD Compatible 1000Base-SX SFP Transceiver (MMF, 850nm, 550m, LC, DOM)
GLC-SX-MM-RGD-VEL	Veloso Cisco® GLC-SX-MM-RGD Compatible 1000Base-SX SFP Transceiver (MMF, 850nm, 550m, LC, DOM, Rugged)
GLC-T-VEL	Veloso Cisco® GLC-T Compatible 1000Base-TX SFP Transceiver (Copper, 100m, RJ-45)
GLC-ZX-SM-VEL	Veloso Cisco® GLC-ZX-SM Compatible 1000Base-ZX SFP Transceiver (SMF, 1550nm, 80km, LC)
GP-10GSFP-1S-VEL	Veloso Force10 Networks® GP-10GSFP-1S Compatible 10GBase-SR SFP+ Transceiver (MMF, 850nm, 300m, LC, DOM)
GP-SFP2-1T-VEL	Veloso Force10 Networks® GP-SFP2-1T Compatible 1000Base-TX SFP Transceiver (Copper, 100m, RJ-45)
J4858C-VEL	Veloso HP® J4858C Compatible 1000Base-SX SFP Transceiver (MMF, 850nm, 550m, LC)
J4859C-VEL	Veloso HP® J4859C Compatible 1000Base-LX SFP Transceiver (SMF, 1310nm, 10km, LC)
J8177C-VEL	Veloso HP® J8177C Compatible 1000Base-TX SFP Transceiver (Copper, 100m, RJ-45)
J9054C-VEL	Veloso HP® J9150A Compatible 10GBase-SR SFP+ Transceiver (MMF, 850nm, 300m, LC, DOM)
J9150A-VEL	Veloso HP® J9151A Compatible 10GBase-LR SFP+ Transceiver (SMF, 1310nm, 10km, LC, DOM)
J9151A-VEL	Veloso HP® JD089B Compatible 1000Base-TX SFP Transceiver (Copper, 100m, RJ-45)
JD089B-VEL	Veloso HP® JD092B Compatible 10GBase-SR SFP+ Transceiver (MMF, 850nm, 300m, LC, DOM)
JD092B-VEL	Veloso HP® JD094B Compatible 10GBase-LR SFP+ Transceiver (SMF, 1310nm, 10km, LC, DOM)
JD094B-VEL	Veloso HP® J9054C Compatible 100Base-FX SFP Transceiver (MMF, 1310nm, 2km, LC)
JD118B-VEL	Veloso HP® JD118B Compatible 1000Base-SX SFP Transceiver (MMF, 850nm, 550m, LC, DOM)
JD119B-VEL	Veloso HP® JD119B Compatible 1000Base-LX SFP Transceiver (SMF, 1310nm, 10km, LC, DOM)
MA-SFP-1GB-LX10-VEL	Veloso Meraki now Cisco® MA-SFP-1GB-LX10 Compatible 1000Base-LX SFP Transceiver (SMF, 1310nm, 10km, LC, DOM)
MA-SFP-1GB-SX-VEL	Veloso Meraki now Cisco® MA-SFP-1GB-SX Compatible 1000Base-SX SFP Transceiver (MMF, 850nm, 550m, LC, DOM)
MGBIC-LC01-VEL	Veloso Enterasys® MGBIC-LC01 Compatible 1000Base-SX SFP Transceiver (MMF, 850nm, 550m, LC)
MGBLX1-VEL	Veloso Linksys® MGBLX1 Compatible 1000Base-LX SFP Transceiver (SMF, 1310nm, 10km, LC)
MGBSX1-VEL	Veloso Linksys® MGBSX1 Compatible 1000Base-SX SFP Transceiver (MMF, 850nm, 550m, LC)
QFX-SFP-1GE-T-VEL	Veloso Juniper Networks® QFX-SFP-1GE-T Compatible 1000Base-TX SFP Transceiver (Copper, 100m, RJ-45)
QFX-SFP-10GE-SR-VEL	Veloso Juniper Networks® QFX-SFP-10GE-SR Compatible 10GBase-SR SFP+ Transceiver (MMF, 850nm, 300m, LC, DOM)
QSFP-40G-SR4-VEL	Veloso Cisco® QSFP-40G-SR4 Compatible 40GBase-SR QSFP+ Transceiver (MMF, 850nm, 150m, MPO, DOM)
SFP-1GB-SX-VEL	Veloso Cisco® SFP-1GB-SX Compatible 1000Base-SX SFP Transceiver (MMF, 850nm, 550m, LC, DOM)
SFP-1GE-FE-E-T-VEL	Veloso Juniper Networks® SFP-1GE-FE-E-T Compatible 10/100/1000Base-TX SFP Transceiver (Copper, 100m, RJ-45)
SFP-1GE-LX-VEL	Veloso Cisco® SFP-GE-L Compatible 1000Base-LX SFP Transceiver (SMF, 1310nm, 10km, LC, DOM)
SFP-10G-ER-VEL	Veloso Cisco® SFP-10G-ER Compatible 10GBase-ER SFP+ Transceiver (SMF, 1550nm, 40km, LC, DOM)
SFP-10G-LR-VEL	Veloso Cisco® SFP-10G-LR Compatible 10GBase-LR SFP+ Transceiver (SMF, 1310nm, 10km, LC, DOM)
SFP-10G-LRM-VEL	Veloso Cisco® SFP-10G-LRM Compatible 10GBase-LRM SFP+ Transceiver (MMF, 1310nm, 220m, LC, DOM)
SFP-10G-SR-VEL	Veloso Cisco® SFP-10G-SR-S Compatible 10GBase-SR SFP+ Transceiver (MMF, 850nm, 300m, DOM)
SFP-10G-SR-S-VEL	Veloso Cisco SFP-10G-SR Compatible 10GBase-SR SFP+ Transceiver (MMF, 850nm, 300m, LC, DOM)
SFP-10G-SR-X-VEL	Veloso Cisco® SFP-10G-SR-X Compatible 10GBase-SR SFP+ Transceiver (MMF, 850nm, 300m, LC, DOM, Rugged)
SFP-1000BASE-LX-VEL	Veloso MSA Compliant 1000Base-LX SFP Transceiver (SMF, 1310nm, 10km, LC)
SFP-1000BASE-SX-VEL	Veloso MSA Compliant 1000Base-SX SFP Transceiver (MMF, 850nm, 550m, LC)
SFP-1000BASE-T-VEL	Veloso MSA Compliant 1000Base-TX SFP Transceiver (Copper, 100m, RJ-45)
SFP-GE-L-VEL	Veloso Juniper Networks® SFP-1GE-LX Compatible 1000Base-LX SFP Transceiver (SMF, 1310nm, 10km, LC)
SFP-GE-LX-VEL	Veloso Redback® SFP-GE-LX Compatible 1000Base-LX SFP Transceiver (SMF, 1310nm, 10km, LC)
SFP-GE-S-VEL GLC-BX-U-VEL	Veloso Cisco® SFP-GE-S Compatible 1000Base-SX SFP Transceiver (MMF, 850nm, 550m, LC, DOM) Veloso Cisco® GLC-BX-U Compatible 1000Base-BX SFP Transceiver (SMF, 1310nmTx/1490nmRx, 10km, LC, DOM)

NETWORK INFRASTRUCTURE SOLUTIONS

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BADGER PART NUMBER:	Description
SFP-GE-T-VEL	Veloso Cisco® SFP-GE-T Compatible 1000Base-TX SFP Transceiver (Copper, 100m, RJ-45)
SFP-SX-VEL	Veloso Napatech® SFP-SX Compatible 1000Base-SX SFP Transceiver (MMF, 850nm, 550m, LC)
SFP-TX-VEL	Veloso Citrix® SFP-TX Compatible 1000Base-TX SFP Transceiver (Copper, 100m, RJ-45)
SFPP-10GE-LR-VEL	Veloso Juniper Networks® SFPP-10GE-LR Compatible 10GBase-LR SFP+ Transceiver (SMF, 1310nm, 10km, LC, DOM)
WS-G5483-VEL	Veloso Cisco® WS-G5483 Compatible 1000Base-TX GBIC Transceiver (Copper, 100m, RJ-45)
WS-G5484-VEL	Veloso Cisco® WS-G5484 Compatible 1000Base-SX GBIC Transceiver (MMF, 850nm, 550m, SC)
WS-G5486-VEL	Veloso Cisco® WS-G5486 Compatible 1000Base-LX GBIC Transceiver (SMF, 1310nm, 10km, SC)
X2-10GB-LR-VEL	Veloso Cisco® X2-10GB-SR Compatible 10GBase-SR X2 Transceiver (MMF, 850nm, 300m, SC, DOM)
X2-10GB-SR-VEL	Veloso Cisco® X2-10GB-LR Compatible 10GBase-LR X2 Transceiver (SMF, 1310nm, 10km, SC, DOM)
XFP10GLR-192SR-L-VEL	Veloso Cisco® XFP10GLR-192SR-L Compatible 10GBase-LR XFP Transceiver (SMF, 1310nm, 10km, LC, DOM)
XFP-10GLR-OC192SR-VEL	Veloso Cisco® XFP-10GLR-OC192SR Compatible 10GBase-LR XFP Transceiver (SMF, 1310nm, 10km, LC, DOM)
XFP-10G-MM-SR-VEL	Veloso Cisco® XFP-10G-MM-SR Compatible 10GBase-SR XFP Transceiver (MMF, 850nm, 300m, LC, DOM)

VELOSO DIRECT ATTACH CABLES

DAC

Connecting two different switches is now simple by Veloso's Dual OEM Compatible Direct Attach Cables. Now you can connect a Cisco® switch to a HP® switch with one high-speed cable without replacing your whole network system. Our direct attach cable line comes in lengths up to 15 meters for copper (twinax, CX4) or up to 100 meters for fiber (AOC). We offer both active and passive solutions for copper cables.

BADGER PART NUMBER:	Description
10304-VEL	Veloso Extreme 10304 Compatible 10GBase-CU SFP+ to SFP+ Direct Attach Cable (Active Twinax, 1m)
10307-VEL	Veloso Extreme 10307 Compatible 10GBase-CU SFP+ to SFP+ Direct Attach Cable (Active Twinax, 10m)
10G-SFPP-TWX-0101-VEL	Veloso Brocade 10G-SFPP-TWX-0101 Compatible 10GBase-CU SFP+ to SFP+ Direct Attach Cable (Active Twinax, 5m)
10G-SFPP-TWX-0301-VEL	Veloso Brocade® 10G-SFPP-TWX-0301 Compatible 10GBase-CU SFP+ to SFP+ Direct Attach Cable (Active Twinax, 3m)
10G-SFPP-TWX-0501-VEL	Veloso Brocade® 10G-SFPP-TWX-0501 Compatible 10GBase-CU SFP+ to SFP+ Direct Attach Cable (Active Twinax, 1m)
2127934-6-VEL	Veloso Tyco® 2127934-6 Compatible 10GBase-CU SFP+ to SFP+ Direct Attach Cable (Passive Twinax, 5m)
330-3966-VEL	Veloso Dell® 330-3966 Compatible 10GBase-CU SFP+ to SFP+ Direct Attach Cable (Passive Twinax, 3m)
330-5967-VEL	Veloso Dell 330-5967 Compatible 10GBase-CU SFP+ to SFP+ Direct Attach Cable (Passive Twinax, 3m)
330-5970-VEL	Veloso Dell® 330-5970 Compatible 10GBase-CU SFP+ to SFP+ Direct Attach Cable (Passive Twinax, 2m)
332-1368-VEL	Veloso Dell® 332-1368 Compatible 10GBase-CU SFP+ to SFP+ Direct Attach Cable (Passive Twinax, 3m)
332-1664-VEL	Veloso Dell 332-1664 Compatible 10GBase-CU SFP+ to SFP+ Direct Attach Cable (Passive Twinax, 0.5m)
332-1665-VEL	Veloso Dell® 332-1665 Compatible 10GBase-CU SFP+ to SFP+ Direct Attach Cable (Passive Twinax, 1m)
332-1667-VEL	Veloso Dell 332-1667 Compatible 10GBase-CU SFP+ to SFP+ Direct Attach Cable (Passive Twinax, 7m)
444477-B22-VEL	Veloso HP® 444477-B22 Compatible 10GBase-CX CX4 to CX4 Direct Attach Cable (Passive Twinax, 1m)
487652-B21-VEL	Veloso HP® 487652-B21 Compatible 10GBase-CU SFP+ to SFP+ Direct Attach Cable (Passive Twinax, 1m)
487655-B21-VEL	Veloso HP® 487655-B21 Compatible 10GBase-CU SFP+ to SFP+ Direct Attach Cable (Passive Twinax, 3m)
537963-B21-VEL	Veloso HP® 537963-B21 Compatible 10GBase-CU SFP+ to SFP+ Direct Attach Cable (Passive Twinax, 5m)
58-1000027-01-VEL	Veloso Brocade 58-1000027-01 Compatible 10GBase-CU SFP+ to SFP+ Direct Attach Cable (Active Twinax, 3m)
68Y6947-VEL	Veloso IBM 68Y6947 Compatible 10GBase-CU SFP+ to SFP+ Direct Attach Cable (Passive Twinax, 3m)
AA1403018-E6-VEL	Veloso Avaya® AA1403018-E6 Compatible 10GBase-CU SFP+ to SFP+ Direct Attach Cable (Active Twinax, 10m)
AA1403019-E6-VEL	Veloso Avaya® AA1403019-E6 Compatible 10GBase-CU SFP+ to SFP+ Direct Attach Cable (Passive Twinax, 3m)
AGC761-VEL	Veloso Netgear Compatible 1000Base-CU SFP to SFP Direct Attach Cable (Passive Twinax, 1m)
AXC763-VEL	Veloso Netgear AXC763 Compatible 10GBase-CU SFP+ to SFP+ Direct Attach Cable (Passive Twinax, 3m)
CAB-SFP-1M-VEL	Veloso Cisco CAB-SFP-1M Compatible 1000Base-CU SFP to SFP Direct Attach Cable (Passive Twinax, 1m)
CAB-SFP-SFP-0.5M-VEL	Veloso Arista® CAB-SFP-SFP-0.5M Compatible 10GBase-CU SFP+ to SFP+ Direct Attach Cable (Passive Twinax, 0.5m)
CAB-SFP-SFP-1M-VEL	Veloso Arista® CAB-SFP-SFP-1M Compatible 10GBase-CU SFP+ to SFP+ Direct Attach Cable (Passive Twinax, 1m)
CAB-SFP-SFP-2M-VEL	Veloso Arista® CAB-SFP-SFP-2M Compatible 10GBase-CU SFP+ to SFP+ Direct Attach Cable (Passive Twinax, 2m)

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BADGER PART NUMBER:	Description
CAB-SFP-SFP-3M-VEL	Veloso Arista® CAB-SFP-SFP-3M Compatible 10GBase-CU SFP+ to SFP+ Direct Attach Cable (Passive Twinax, 3m)
CAB-SFP-SFP-5M-VEL	Veloso Arista® CAB-SFP-SFP-5M Compatible 10GBase-CU SFP+ to SFP+ Direct Attach Cable (Passive Twinax, 5m)
CBL-10GSFP-DAC-1M-VEL	Veloso Force10 CBL-10GSFP-DAC-1M Compatible 10GBase-CU SFP+ to SFP+ Direct Attach Cable (Passive Twinax, 1m)
CBL-10GSFP-DAC-5M-VEL	Veloso Force10 CBL-10GSFP-DAC-5M Compatible 10GBase-CU SFP+ to SFP+ Direct Attach Cable (Passive Twinax, 5m)
CBL-QSFP-40GE-10M-VEL	Veloso Force10 CBL-QSFP-40GE-10M Compatible 40GBase-AOC QSFP+ to QSFP+ Direct Attach Cable (850nm, MMF, 10m)
CBL-TA-1M-VEL	Veloso Cisco CBL-TA-1M Compatible 10GBase-CU SFP+ to SFP+ Direct Attach Cable (Passive Twinax, 1m)
DAC-SFP-10GE-1M-VEL	Veloso Aruba® DAC-SFP-10GE-1M Compatible 10GBase-CU SFP+ to SFP+ Direct Attach Cable (Passive Twinax, 1m)
DAC-SFP-10GE-3M-VEL	Veloso Aruba® DAC-SFP-10GE-3M Compatible 10GBase-CU SFP+ to SFP+ Direct Attach Cable (Passive Twinax, 3m)
DAC-SFP-10GE-50CM-VEL	Veloso Aruba® DAC-SFP-10GE-50CM Compatible 10GBase-CU SFP+ to SFP+ Direct Attach Cable (Passive Twinax, 0.5m)
EX-QSFP-40GE-DAC-50CM-VEL	Veloso Juniper® EX-QSFP-40GE-DAC-50CM Compatible 40GBase-CU QSFP+ to QSFP+ Direct Attach Cable (Passive Twinax, 0.5m)
EX-SFP-10GE-DAC-1M-VEL	Veloso Juniper® EX-SFP-10GE-DAC-1m Compatible 10GBase-CU SFP+ to SFP+ Direct Attach Cable (Passive Twinax, 1m)
EX-SFP-10GE-DAC-3M-VEL	Veloso Juniper® EX-SFP-10GE-DAC-3m Compatible 10GBase-CU SFP+ to SFP+ Direct Attach Cable (Passive Twinax, 3m)
EX-SFP-10GE-DAC-5M-VEL	Veloso Juniper® EX-SFP-10GE-DAC-5m Compatible 10GBase-CU SFP+ to SFP+ Direct Attach Cable (Passive Twinax, 5m)
EX-SFP-10GE-DAC-7M-VEL	Veloso Juniper EX-SFP-10GE-DAC-7m Compatible 10GBase-CU SFP+ to SFP+ Direct Attach Cable (Passive Twinax, 7m)
J9281B-VEL	Veloso HP® J9281B Compatible 10GBase-CU SFP+ to SFP+ Direct Attach Cable (Passive Twinax, 1m)
J9283B-VEL	Veloso HP® J9283B Compatible 10GBase-CU SFP+ to SFP+ Direct Attach Cable (Passive Twinax, 3m)
J9284B-VEL	Veloso HP® J9284B Compatible 10GBase-CU SFP+ to SFP+ Direct Attach Cable (Passive Twinax, 5m)
JC784C-VEL	Veloso HP® JC784C Compatible 10GBase-CU SFP+ to SFP+ Direct Attach Cable (Passive Twinax, 7m)
JD095C-VEL	Veloso HP® JD095C Compatible 10GBase-CU SFP+ to SFP+ Direct Attach Cable (Passive Twinax, 0.5m)
JD096C-VEL	Veloso HP® JD096C Compatible 10GBase-CU SFP+ to SFP+ Direct Attach Cable (Passive Twinax, 1m)
JD097C-VEL	Veloso HP® JD097C Compatible 10GBase-CU SFP+ to SFP+ Direct Attach Cable (Passive Twinax, 3m)
JE054A-VEL	Veloso HP® JE054A Compatible 10GBase-CX CX4 to CX4 Direct Attach Cable (Passive Twinax, 0.5m)
JG081C-VEL	Veloso HP® JG081C Compatible 10GBase-CU SFP+ to SFP+ Direct Attach Cable (Passive Twinax, 5m)
JG326A-VEL	Veloso HP® JG326A Compatible 40GBase-CU QSFP+ to QSFP+ Direct Attach Cable (Passive Twinax, 1m)
JG327A-VEL	Veloso HP JG327A Compatible 40GBase-CU QSFP+ to QSFP+ Direct Attach Cable (Passive Twinax, 3m)
JNP-QSFP-DAC-5M-VEL	Veloso Juniper Networks® Compatible 40GBase-CU QSFP+ to QSFP+ Direct Attach Cable (Passive Twinax, 5m)
MA-CBL-TA-1M-VEL	Veloso Meraki® MA-CBL-TA-1M Compatible 10GBase-CU SFP+ to SFP+ Direct Attach Cable (Passive Twinax, 1m)
MA-CBL-TA-3M-VEL	Veloso Meraki® MA-CBL-TA-3M Compatible 10GBase-CU SFP+ to SFP+ Direct Attach Cable (Passive Twinax, 3m)
QFX-QSFP-DAC-1M-VEL	Veloso Juniper QFX-QSFP-DAC-1M Compatible 40GBase-CU QSFP+ to QSFP+ Direct Attach Cable (Passive Twinax, 1m)
QFX-QSFP-DAC-3M-VEL	Veloso Juniper® QFX-QSFP-DAC-3M Compatible 40GBase-CU QSFP+ to QSFP+ Direct Attach Cable (Passive Twinax, 3m)
QFX-QSFP-DACBO-5M-VEL	Veloso Juniper Networks® Compatible 40GBase-CU QSFP+ to 4xSFP+ Direct Attach Cable (Passive Twinax, 5m)
QFX-SFP-DAC-3M-VEL	Veloso Juniper® QFX-SFP-DAC-3M Compatible 10GBase-CU SFP+ to SFP+ Direct Attach Cable (Passive Twinax, 3m)
QFX-SFP-DAC-5M-VEL	Veloso Juniper® QFX-SFP-DAC-5M Compatible 10GBase-CU SFP+ to SFP+ Direct Attach Cable (Passive Twinax, 5m)
QK702A-VEL	Veloso HP® QK702A Compatible 10GBase-CU SFP+ to SFP+ Direct Attach Cable (Active Twinax, 10m)
QSFP-40G-PDAC3M-VEL	Veloso MSA® Compliant 40GBase-CU QSFP+ to QSFP+ Direct Attach Cable (Passive Twinax, 3m)
QSFP-4SFP10G-CU1M-VEL	Veloso Cisco® QSFP-4SFP10G-CU1M Compatible 40GBase-CU QSFP+ to 4xSFP+ Direct Attach Cable (Passive Twinax, 1m)
QSFP-4SFP10G-CU3M-VEL	Veloso Cisco QSFP-4SFP10G-CU3M Compatible 40GBase-CU QSFP+ to 4xSFP+ Direct Attach Cable (Passive Twinax, 3m)
QSFP-4SFP10G-CU5M-VEL	Veloso Cisco QSFP-4SFP10G-CU5M Compatible 40GBase-CU QSFP+ to 4xSFP+ Direct Attach Cable (Passive Twinax, 5m)
QSFP-4SFP-PDAC2M-VEL	Veloso MSA Compliant 40GBase-CU QSFP+ to 4xSFP+ Direct Attach Cable (Passive Twinax, 2m)
QSFP-4SFP-PDAC3M-VEL	Veloso MSA Compliant 40GBase-CU QSFP+ to 4xSFP+ Direct Attach Cable (Passive Twinax, 3m)
QSFP-4X10G-AOC3M-VEL	Veloso Cisco QSFP-4X10G-AOC3M Compatible 40GBase-AOC QSFP+ to 4xSFP+ Direct Attach Cable (850nm, MMF, 3m)
QSFP-H40G-ACU7M-VEL	Veloso Cisco® QSFP-H40G-ACU7M Compatible 40GBase-CU QSFP+ to QSFP+ Direct Attach Cable (Active Twinax, 7m)
QSFP-H40G-ACU10M-VEL	Veloso Cisco® QSFP-H40G-ACU10M Compatible 40GBase-CU QSFP+ to QSFP+ Direct Attach Cable (Active Twinax, 10m)
QSFP-H40G-AOC1M-VEL	Veloso Cisco QSFP-H40G-AOC1M Compatible 40GBase-AOC QSFP+ to QSFP+ Direct Attach Cable (850nm, MMF, 1m)
QSFP-H40G-AOC7M-VEL	Veloso Cisco® QSFP-H40G-AOC7M Compatible 40GBase-AOC QSFP+ to QSFP+ Direct Attach Cable (850nm, MMF, 7m)
QSFP-H40G-CU1M-VEL	Veloso Cisco® QSFP-H40G-CU1M Compatible 40GBase-CU QSFP+ to QSFP+ Direct Attach Cable (Passive Twinax, 1m)
QSFP-H40G-CU3M-VEL	Veloso Cisco® QSFP-H40G-CU3M Compatible 40GBase-CU QSFP+ to QSFP+ Direct Attach Cable (Passive Twinax, 3m)

NETWORK INFRASTRUCTURE SOLUTIONS

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BADGER PART NUMBER:	Description
SFP-10G-AOC1M-VEL	Veloso Cisco® SFP-10G-AOC1M Compatible 10GBase-AOC SFP+ to SFP+ Direct Attach Cable (850nm, MMF, 1m)
SFP-10G-AOC3M-VEL	Veloso Cisco® SFP-10G-AOC3M Compatible 10GBase-AOC SFP+ to SFP+ Direct Attach Cable (850nm, MMF, 3m)
SFP-10G-AOC5M-VEL	Veloso Cisco® SFP-10G-AOC5M Compatible 10GBase-AOC SFP+ to SFP+ Direct Attach Cable (850nm, MMF, 5m)
SFP-10G-AOC7M-VEL	Veloso Cisco® SFP-10G-AOC7M Compatible 10GBase-AOC SFP+ to SFP+ Direct Attach Cable (850nm, MMF, 7m)
SFP-10G-AOC10M-VEL	Veloso Cisco® SFP-10G-AOC10M Compatible 10GBase-AOC SFP+ to SFP+ Direct Attach Cable (850nm, MMF, 10m)
SFP-10G-PDAC1M-VEL	Veloso MSA® Compliant 10GBase-CU SFP+ to SFP+ Direct Attach Cable (Passive Twinax, 1m)
SFP-10G-PDAC3M-VEL	Veloso MSA® Compliant 10GBase-CU SFP+ to SFP+ Direct Attach Cable (Passive Twinax, 3m)
SFP-10G-PDAC5M-VEL	Veloso MSA® Compliant 10GBase-CU SFP+ to SFP+ Direct Attach Cable (Passive Twinax, 5m)
SFP-10G-PDAC50CM-VEL	Veloso MSA Compliant 10GBase-CU SFP+ to SFP+ Direct Attach Cable (Passive Twinax, 0.5m)
SFP-10GE-DAC-1M-VEL	Veloso Juniper® SFP-10GE-DAC-1M Compatible 10GBase-CU SFP+ to SFP+ Direct Attach Cable (Passive Twinax, 1m)
SFP-10GE-DAC-3M-VEL	Veloso Juniper® SFP-10GE-DAC-3M Compatible 10GBase-CU SFP+ to SFP+ Direct Attach Cable (Passive Twinax, 3m)
SFP-10GE-DAC-5M-VEL	Veloso Juniper® SFP-10GE-DAC-5M Compatible 10GBase-CU SFP+ to SFP+ Direct Attach Cable (Passive Twinax, 5m)
SFP-H10GB-ACU5M-VEL	Veloso Cisco® SFP-H10GB-ACU5M Compatible 10GBase-CU SFP+ to SFP+ Direct Attach Cable (Active Twinax, 5m)
SFP-H10GB-ACU7M-VEL	Veloso Cisco® SFP-H10GB-ACU7M Compatible 10GBase-CU SFP+ to SFP+ Direct Attach Cable (Active Twinax, 7m)
SFP-H10GB-ACU10M-VEL	Veloso Cisco® SFP-H10GB-ACU10M Compatible 10GBase-CU SFP+ to SFP+ Direct Attach Cable (Active Twinax, 10m)
SFP-H10GB-CU.5M-VEL	Veloso Cisco® SFP-H10GB-CU.5M Compatible 10GBase-CU SFP+ to SFP+ Direct Attach Cable (Passive Twinax, 0.5m)
SFP-H10GB-CU0-5M-VEL	Veloso Cisco® SFP-H10GB-CU0-5M Compatible 10GBase-CU SFP+ to SFP+ Direct Attach Cable (Passive Twinax, 0.5m)
SFP-H10GB-CU1M-VEL	Veloso Cisco® SFP-H10GB-CU1M Compatible 10GBase-CU SFP+ to SFP+ Direct Attach Cable (Passive Twinax, 1m)
SFP-H10GB-CU1-5M-VEL	Veloso Cisco® SFP-H10GB-CU1-5M Compatible 10GBase-CU SFP+ to SFP+ Direct Attach Cable (Passive Twinax, 1.5m)
SFP-H10GB-CU2M-VEL	Veloso Cisco® SFP-H10GB-CU2M Compatible 10GBase-CU SFP+ to SFP+ Direct Attach Cable (Passive Twinax, 2m)
SFP-H10GB-CU2-5M-VEL	Veloso Cisco® SFP-H10GB-CU2-5M Compatible 10GBase-CU SFP+ to SFP+ Direct Attach Cable (Passive Twinax, 2.5m)
SFP-H10GB-CU3M-VEL	Veloso Cisco® SFP-H10GB-CU3M Compatible 10GBase-CU SFP+ to SFP+ Direct Attach Cable (Passive Twinax, 3m)
SFP-H10GB-CU5M-VEL	Veloso Cisco® SFP-H10GB-CU5M Compatible 10GBase-CU SFP+ to SFP+ Direct Attach Cable (Passive Twinax, 5m)
SFP-H10GB-CU7M-VEL	Veloso Cisco® SFP-H10GB-CU7M Compatible 10GBase-CU SFP+ to SFP+ Direct Attach Cable (Passive Twinax, 7m)
XDACBL2M-VEL	Veloso Intel® XDACBL2M Compatible 10GBase-CU SFP+ to SFP+ Direct Attach Cable (Passive Twinax, 2m)

WAC6500

The WAC6500 series delivers industry-leading Wi-Fi performance with its innovative smart antenna design, offering more than 700 optimized signal patterns. The ZyXEL smart antenna continuously calculates the ideal physical-layer path for each individual client. This feature not only provides the best possible signal by shaping to various patterns, it also mitigates interference from other wireless clients.

Perfect choice of high-density environments
Designed with smart antenna, the WAC6500 series provides dynamic signal patterns to deliver best service to every client. In addition, advanced Wi-Fi features such as load balancing and smart-client steering ensure a smooth, consistent, and uninterrupted wireless access experience for all users.

Easy to deploy in multiple-AP environments
WAC6500 series is extraordinarily easy to install with the ZyXEL APFlex™ feature. While deploying large groups of WAC6500 series with AP controllers in place, APFlex™ enables streamline and hassle-free installation, simple switching between Managed/Standalone AP modes and automatic integration of APs into the network environment. When operating, DCS (dynamic channel selection) balances the AP channels to reduce signal interference.

BADGER PART NUMBER:	DESCRIPTION:
WAC6103D-I	High Powered Dual Band Dual Radio 2.4/5Ghz 3x3 802.11ac AP w/PoE Power Only, IPv6 Internal Antenna for Wall or Ceiling, Low Profile
WAC6502D-E	High Powered Dual Band Dual Radio 2.4/5Ghz 2x2 802.11ac AP w/PoE Power IPv6 External Antenna (Optional Power Supply Sold Separately)
WAC6502D-S	High Powered Dual Band Dual Radio 2.4/5Ghz 2x2 802.11ac AP w/PoE Power IPv6 SMART Antenna Design (Optional Power Supply Sold Separately)
WAC6503D-S	High Powered Dual Band Dual Radio 2.4/5Ghz 3x3 802.11AC AP w/PoE Power IPv6 SMART Antenna Design (Optional Power Supply Sold Separately)
WAC6553D-E	OUTDOOR High Powered Dual Band Dual Radio 2.4/5Ghz 3x3 802.11AC AP w/PoE Power Injector IPv6 (External Antennas Sold Seperately) Need 3 per Radio

SWITCHES

Zyxel switch solutions offer reliable, premium quality switches backed by profound knowledge and experience in telco-class equipment. Zyxel switch solutions have mission-oriented design and boast a complete product portfolio to offer the best-fit solution for customers. These solutions meet a wide variety of SB and SMB needs across multiple different vertical markets.

Agile traffic control for converged networking applications
Zyxel XGS2210/GS2210 Series has a rich Layer 2 feature set that can shape the traffic for diverse VoIP, video conference, IPTV and IP surveillance deployments and provide hotels, businesses and educational institutions greater agility and more effective traffic management for the converged applications of today.

High-powered Power over Ethernet (PoE)
The Zyxel XGS2210/GS2210 Series PoE switches support the IEEE 802.3af PoE and 802.3at PoE Plus standards, which provide up to 30 watts of power per port for advanced Powered Devices (PD) like 802.11ac wireless APs and video IP phones. The high power budget enables the XGS2210/GS2210 PoE switches to comfortably accommodate the PDs required in a modern network edge.

High level network and access security
Zyxel XGS2210/GS2210 Series offers enhanced control and isolation for improved convergence of video, voice and data. Such advanced defense mechanisms as IP source guard, DHCP snooping, and ARP inspection can detect and block intentional network attacks. Combining multiple L2, L3 and L4 filtering mechanisms with such education - and hospitality friendly features as MAC freeze, port isolation and guest VLAN, the Zyxel XGS2210/GS2210 Series offers a high level of security, flexibility and control for diverse access layer deployments.

BADGER PART NUMBER:	DESCRIPTION:
GS2210-8	8-Port Gigabit + 2 Dual Personality (GBE RJ-45/SFP) (10 Total Ports)
GS2210-8HP	8-Port Gigabit 802.3at POE + 2 Dual Personality (GBE RJ-45/SFP) (10 Total Ports) 180W Power Budget
GS2210-24	24-Port Gigabit + 4 Dual Personality (GbE RJ-45/SFP) (28 Total Ports)
GS2210-24LP	24-Port Gigabit POE + 4 Dual Personality (GBE RJ-45/SFP) (28 Total Ports) 180W Power Budget
GS2210-24HP	24-Port Gigabit POE + 4 Dual Personality (GBE RJ-45/SFP) (28 Total Ports) 375W Power Budget
GS2210-48	44-Port Gigabit + 4 Dual Personality (GBE RJ-45/SFP) + 2 Stacking SFP
GS2210-48HP	44-Port PoE+ Gigabit + 4 Dual Personality (GBE RJ-45/SFP) + 2 Stacking SFP 375W Power Budget
XGS2210-28	24-Port Gigabit L2 Managed + 4 SFP+ 10G (28 Total Ports)
XGS2210-28HP 2	4-Port Gigabit POE+ L2 Managed + 4 SFP+ 10G (28 Total Ports) 375W Power Budget
XGS2210-52	48-Port Gigabit L2 Managed + 4 SFP+ 10G (52 Total Ports)
XGS2210-52HP	48-Port Gigabit PoE+ L2 Managed + 4 SFP+ 10G (52 Total Ports) 375W Power Budget

NETWORK INFRASTRUCTURE SOLUTIONS