

OmniConverter[®] 10GMG/Sx

Unmanaged Multi-Gigabit/Multi-Rate 100M, 1G, 2.5G, 5G, 10G Ethernet Switch

The OmniConverter 10GMG/Sx are unmanaged multi-gigabit Ethernet switches. They feature one 1/10G SFP/SFP+ or multi-gigabit/multi-rate RJ-45 uplink port and two multi-gigabit/multi-rate RJ-45 and two 10/100/1000 RJ-45 user ports.

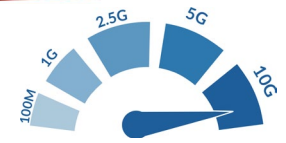
The RJ-45 user ports support multi-gigabit/multi-rate speeds of 100Mbps, 1Gbps, 2.5Gbps, 5Gbps and 10Gbps, supporting frame sizes up to 10,240 bytes.

All models support Directed Switch mode, which directs multicast traffic (such as video) only to the appropriate uplink port, preventing multicast traffic from flooding other network ports.

The OmniConverter switches are well suited for the bandwidth demands imposed by IP cameras, access points and small cell devices on the market today. OmniConverter 10G switches provide high-speed network distance extension with fiber optic cabling.

The switches feature a Small Form Pluggable (SFP) transceiver receptacle port supporting a variety of copper and fiber transceivers. It supports 10/100/1000BASE-T, 1000BASE-T, 100M/1G/2.5G/5G/10GBASE-T multi-gigabit copper transceivers and 1G and 10G multimode or single-mode fiber, dual or single-fiber transceivers in standard, CWDM and DWDM wavelengths.

The compact standalone OmniConverter switches can be tabletop mounted, wall mounted, or DIN-rail mounted using an optional DIN-rail mounting clip (8251-0). They can also be mounted on a 1U 19" rack-mount shelf. They are available with DC input power via terminal connector or an external 100 to 240VAC power adapter.



SFPs not included

KEY FEATURES

- Unmanaged 10G multi-gigabit/multi-rate Ethernet Switch
- Directed Switch mode prevents flooding of multicast video traffic
- One SFP/SFP+ transceiver uplink port or multi-gigabit/multi-rate copper port
- 1/10G SFP/SFP+ supports standard/CWDM/DWDM fiber transceiver uplink port
- Uplink port supports copper and fiber SFP/SFP+ transceivers
- Multi-gigabit/multi-rate ports support speeds of 100Mbps, 1Gbps, 2.5Gbps, 5Gbps and 10Gbps
- Two multi-gigabit/multi-rate RJ-45 and two 10/100/1000 RJ-45 user ports
- AC to DC Power Adapter or 2-Pin DC terminal
- Wall, Rack and DIN-rail mountable
- Commercial (0° to 50°C), wide (-40° to 60°C) and extended (-40° to 75°C) operating temperature ranges
- TAA, BAA and NDAA compliant, and Made in the USA
- Free 24/7/365 Technical Support

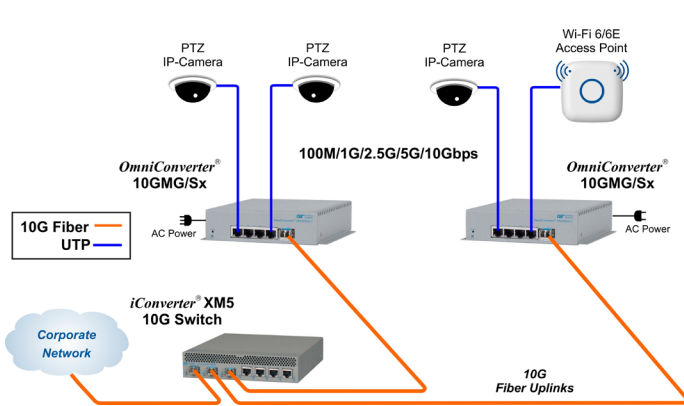
APPLICATIONS

Security and Wireless

In this application example, outdoor IP surveillance cameras and Wi-Fi 6/6E Access Points are installed throughout a large facility. An iConverter[®] XM5 aggregation fiber switch is used to distribute a fiber link from a control room to OmniConverter[®] switches with fiber SFP ports.

The OmniConverter 10GMG/Sx provides up to 10G to an IP camera and Wireless Access Point at each location, each of which can be located up to 100 meters from the switches.

The camera and access point have full bandwidth capability utilizing the 10G fiber uplink port on each 10GMG/Sx switch.

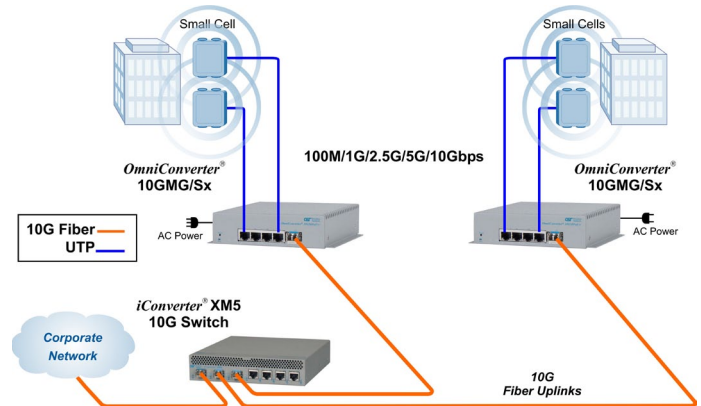


Small Cell

Small cell devices are increasing their demand on bandwidth requirements. Speeds of 10Gbps is common with today's small cell devices.

In this application example, high-speed small cell devices requiring up to 10Gbps bandwidth are deployed inside several buildings. An iConverter[®] XM5 aggregation fiber switch is used to distribute a fiber link to each OmniConverter switch.

The OmniConverter 10GMG/Sx switches provide up to 10Gbps on the RJ-45 user ports.

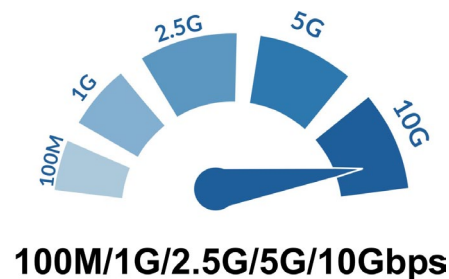
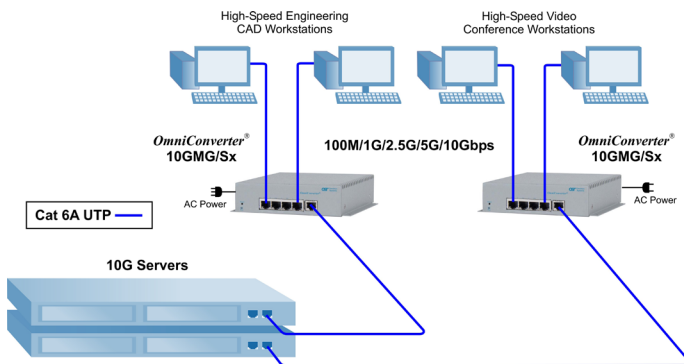


Workstation

In this application example, high-speed workstations are connected to OmniConverter 10GMG/Sx multi-gigabit/multi-rate copper switches. The 10GMG/Sx switches have a copper uplink port that connects to 10G Servers via Category 6A copper cabling.

The OmniConverter 10GMG/Sx provides up to 10G to the workstations at each location.

The workstations have full bandwidth capability utilizing the 10G copper uplink port on each 10GMG/Sx switch.



SPECIFICATIONS

Description	OmniConverter® 10GMG/Sx Unmanaged IEEE 10Gigabit Multi-Gigabit/Multi-Rate Ethernet Switch
Standard Compliances	IEEE 802.3, 802.3bz,
Regulatory Compliances (Pending)	<p>Safety: UL 62368-1, UL 60950-1, IEC 62368-1, IEC 60950-1, EN 62368-1, EN 60950-1, CAN/CSA C22.2 No. 62368-1-14, CAN/CSA C22.2 No. 60950-1, CE Mark, UKCA</p> <p>EMC: EN 55032/24 CE Emissions/Immunity, IEC 61000-6-4 Industrial Emissions, IEC 61000-6-2 Industrial Immunity</p> <p>EMI: CISPR 32, FCC 47 Part 15 Subpart B Class A</p> <p>EMS: IEC 61000-4-2 ESD: Contact: 6 kV; Air: 8 kV, IEC 61000-4-3 RS: 80 MHz to 1 GHz: 10 V/m, IEC 61000-4-4 EFT: Power: 2 kV; Signal: 1 kV (DC models), IEC 61000-4-4 EFT: Power: 1 kV; Signal: 1 kV (AC models), IEC 61000-4-5 Surge: Power: 2 kV; Signal: 2 kV (DC models), IEC 61000-4-5 Surge: Power: 1 kV Line/Line; 2 kV Line/Gnd; Signal: 2 kV (AC models), IEC 61000-4-6 CS: Signal: 10 V, IEC 61000-4-8 (Magnetic Field) 30A/m, IEC 61000-4-11 (Voltage Dips, interrupts)</p> <p>IP Rating: IP20 Protection</p> <p>ACT: TAA, BAA, NDAA</p>
Environmental	REACH, RoHS and WEEE
Frame Size	Up to 10,240 bytes
Port Types	<p>Copper: 100/1000BASE-T, 2.5GBASE-T/5GBASE-T/10GBASE-T (RJ-45) 10/100/1000BASE-T (RJ-45)</p> <p>SFP/SFP+: 10GBASE-X Fiber Transceivers, 10GBASE-T Copper Transceivers 1000BASE-X Fiber Transceivers, 1000BASE-T Copper Transceivers 10/100/1000BASE-T SGMII Copper Transceivers 100/1000/2.5G/5G/10GBASE-T Multi-rate Copper Transceivers</p>
Cable Types	<p>Copper: Twisted-pair cable up to 100 meters 10BASE-T: 4-pair UTP Cat 3, 4, 5, 5e, 6, 6A 100BASE-TX: 4-pair UTP Cat 5, 5e, 6, 6A 1G/2.5G: 4-pair UTP Cat 5e, 6, 6A, 7 5G: 4-pair UTP Cat 6, 6A, 7 10G: 4-pair UTP Cat 6A, 7</p> <p>Fiber: Multimode: 50/125, 62.5/125µm Single-mode: 9/125µm</p>
AC Power Requirements (Models with AC/DC Adapters)	100 - 240VAC/50 - 60Hz 0.25A max at 115VAC 0.12A max at 230VAC
DC Power Requirements (Models with DC Terminals)	+12 to +57VDC; 0.82A @ 12VDC 0.21A @ 48VDC 2 Pin Terminal (isolated)
Dimensions (W x D x H)	6.28" x 5.2" x 1.5" (159.5 mm x 132.1 mm x 38.1 mm)
Weight	Module Only: 1.5 lbs. (680 grams) Module with AC/DC Adapter: 2.0 lbs. (907 grams)
Operating Temperature (See Temperature Derating Table)	Commercial: 0 to 50°C Wide: -40 to 60°C (-20°C AC cold start) Extended: -40 to 75°C Storage: -40 to 80°C
Humidity	5 to 95% (non-condensing)
Altitude	-100m to 4,000m (operational)
MTBF (hours)	Module Only: 261,000 AC/DC Adapter: 100,000
Warranty	5 year product warranty with 24/7/365 free Technical Support and 2 year AC power adapter warranty

ORDERING INFORMATION

Step 1: Choose the Base Part Number (xxxx-x-xx-pt)

OmniConverter 10GMG/Sx Models	
Model Number	Description
9650-0-14-pt	10GMG/Sx - 1 x SFP+ + 2 x 100/1G/2.5G/5G/10G RJ-45 ports + 2 x 10/100/1000 RJ-45 ports
9650-1-14-pt	10GMG/Sx - 1 x 100/1G/2.5G/5G/10G RJ-45 + 2 x 100/1G/2.5G/5G/10G RJ-45 ports + 2 x 10/100/1000 RJ-45 ports
Contact Omnitron for other fiber options. Order the appropriate SFPs separately. Visit the Omnitron Optical Transceivers web page.	

Step 2: Choose the Power Option (xxxx-x-xx-pt)

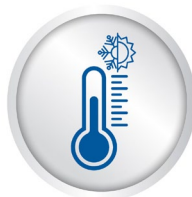
1 = External AC/DC Adapter, 100 - 240 VAC included, with US Power Cord
2 = External AC/DC Adapter, 100 - 240 VAC included, No Power Cord
8 = External AC/DC Adapter, 100 - 240 VAC included, PS JET/PSE Certified, with Japanese Power Cord
9 = Direct DC 2 pin terminal connector, no AC/DC power adapter

Step 3: Choose the Operating Temperature Range Option (xxxx-x-xx-pt)

<leave blank> = Commercial temperature (0 to 50°C)
W = Wide temperature (-40 to 60°C)
Z = Extended temperature (-40 to 75°C)

ACCESSORIES

Accessories			
Model Number	Description	Model Number	Description
8251-0	DIN-Rail Mounting Clip	8260-0	19" rack mount shelf (up to 2 switches)



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