

RELIABLE SECURE CONNECTIVITY

XEG7604/XEG7608 Series

4 or 8-Port Industrial Layer-3 Managed Gigabit PoE Switch





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FEATURE HIGHLIGHTS

- Up to 8 10/100/1000 BASE-T(X) RJ45 ports or 1000 BASE-X SFP slots.
- Up to 8 802.3af/ 802.3at Power over Ethernet ports, with maximum 30W PoE power per port and maximum 240 W device power budget.
- Powerful Layer-3 Switching, supporting IPv4 Static, RIPv1/v2 and OSPFv2
- Layer-2 Redundancy, with ERPS, RSTP, STP, MRP (Client) and more.
- Profinet CC-B conformance and EtherNet/IP Ready
- EN50155 / EN50121-4 Certified for Railway applications
- IEEE 1588v2 Precision Time Protocol Hw-Based Transparent clock
- CE/FCC/UL and NEMA TS-2 Certified for Traffic Control Applications
- Operational between -20°C~70°C; up to 4,000m in elevation



PRODUCT DESCRIPTION

The **XEG7604/XEG7608 Series** is an Industrial Grade Layer-3 Managed Gigabit Ethernet PoE Switch. Designed to provide a highly reliable, fault-tolerant, extremely fast network connection in harsh environments, **XEG7604/XEG7608 Series** equips two terminal blocks to provide dual redundant power inputs with Reverse Polarity Protection and allows field engineers to build up a stand-alone fault alarm system. **XEG76XX family** is UL, CE, FCC and NEMA TS-2 certified, allowing the use in Traffic Control Applications.

Within its compact DIN-Rail housing design, the **XEG7604/XEG7608 series** allows you to choose between different port combinations: 10/100/1000 BASE-T(X) RJ45 port, 1000 BASE-X SFP port and IEEE 802.3af/at complaint PoE RJ45. XEG7604/08 provide, in its 8-PoE-Port Version, up to 240W power budget. Layer-3 routing support IPv4 static routing, RIP v1/v2 and OSPFv2.

This is the right choice if you want to set up a Reliable network environment with its intelligent features and keep equipment connected all the time, even in case of temporary network breakdowns through RSTP, ERPS Rings and MRP (client) redundancy. And that's not all. Designed specifically for Automation, it conforms with Profinet CC-B v2.33 and is EtherNet/IP compatible, MAC-based Black List/White List, IEEE 802.1x, RADIUS, TACACS+, etc., and keep your network safe.

The **XEG76XX Series** is fully EN50155-certified to ensure reliable performance under a wide range of power supply conditions, and it complies with essential sections of EN50121-4 for ground equipment.



Technical Specifications	
Model Name	XEG7604/XEG7608
Switch Properties	
Priority Queues	8
VLAN Table	4096
MAC-Based VLAN	512
VLAN ID Range	VID 1 to 4094
Trunk Group	4
Static IGMP Groups	128
Dynamic IGMP Groups	256
MAC Table Size	16K
Packet Buffer Size	MB 1.5
Jumbo Frame	Byte 9216
Ethernet	
Standards	IEEE 802.3af / 802.3at for Power-over-Ethernet IEEE 802.3 for 10BASE-T IEEE 802.3u for 100BASE-T(X) IEEE 802.3ab for 1000BASE-T IEEE 802.3z for 1000BASE-X IEEE 802.3x for Flow Control IEEE 802.1d-2004 for Spanning Tree Protocol IEEE 802.1w for Rapid Spanning Tree Protocol IEEE 802.1s for Multiple Spanning Tree Protocol IEEE 802.1q for VLAN Tagging IEEE 802.1p for Class of Service IEEE 8021x for Authentication IEEE 802.3ad for Port Trunk with LACP IEEE 802.3az for Energy Efficient Ethernet
Protocols	IPv4, IPv6, IGMPv1/v2/v3, IGMP Snooping, GARP, GMRP, GVRP, SNMPv1/v2c/ v3, SNMP Inform, ICMP, Telnet, SSH, DHCP Server/Relay/Client, DHCP Option 66/67/82, BootP, RARP, TFTP, NTP Server/Client, SNTP, SMTP, SMTP (Gmail), RMON, HTTP, HTTPS, Syslog, MRP (Client), LLDP, IEEE 1588 PTP V1/V2, IEEE 1588 Hardware Transparent Clock, 802.1x, EAP, RADIUS, TACACS+, Mirror port, QoS, ACL, Serial Console, U-Ring, STP, RSTP, MSTP, Compatible Ring
Layer-3 Protocols	Routing: IPv4 Unicast static routing, RIP v1/v2, OSPFv2, Multicast: IGMPv1/v2/v3, DVMRP, PIM-DM, PIM-SM, PIM-SSM Routing Redundancy: VRRP (Virtual Router Redundancy Protocol)
Automation Profiles	Profinet CC-B v2.33 conformance, EtherNet/IP ready, Modbus/TCP status registers
SNMP MIB	MIB II, IF-MIB, SNMPv2 MIB, BRIDGE-MIB, RMON MIB Group 1,2,3,9, RFC RFC 1157, RFC 1213, RFC 1215, RFC 1493, RFC 1643, RFC 1757, RFC 2011, RFC 2012, RFC 2013, RFC 2233, RFC 2571, RFC 2742, RFC 2819, RFC 2863, RFC 3411, RFC 3412, RFC 3413, RFC 3414, RFC 3415, RFC 2674
Power	
Input Voltage	9-57 VDC for Non-PoE models 45-57 VDC for 802.3af mode 51-57 VDC for 802.3at mode
Input Current (System)	Max. 1.4A @ 9VDC (without PoE) Max. 2.9A @ 45VDC (Support up to 8 ports at 15.4W per PoE port) Max. 5.0A @ 51VDC (Support up to 8 ports at 30W per PoE port)
Power Consumption (System)	Max 12.6 W @9 VDC (without PoE) Max 130.5 W @45VDC (802.3af, with 15.4W PoE per port for 8 ports) Max 255 W @51VDC (802.3at, with 30W PoE per port for 8 ports)
Connector Reverse Polarity Protection	5-Pin 5.08mm Lockable Terminal Block Yes



Interfaces	
RJ45 Ports	Up to 8 10/100/1000BASE-T(X) auto negotiation speed
Fiber Optics Ports	Up to 4 1000BASE-X SFP slot
LED Indicators	PWR1, PWR2, Alarm, Run, Ring, Ring Master, RJ-45 Link/Speed, SFP Link
Console	PoE RS232 (RJ45 connector)
Relay Output	Relay outputs with current carrying capacity of 1A @ 24 VDC 2
DIP Switches	Ring Control and Profinet Setting
Button	Reset Button
Physical Characteristics	
Housing	IP30 aluminum housing
Dimension (W x H x D)	54 x 113 x 145 mm
Weight	800g
Installation	DIN-Rail , Wall mount (optional kit)
Environmental Limits	
Operating Temperature	-20°C~70°C (-4°F~158°F)
Storage Temperature	-40°C~85°C (-40°F~185°F)
Ambient Relative Humidity	5%~95%, 55°C (Non-condensing)



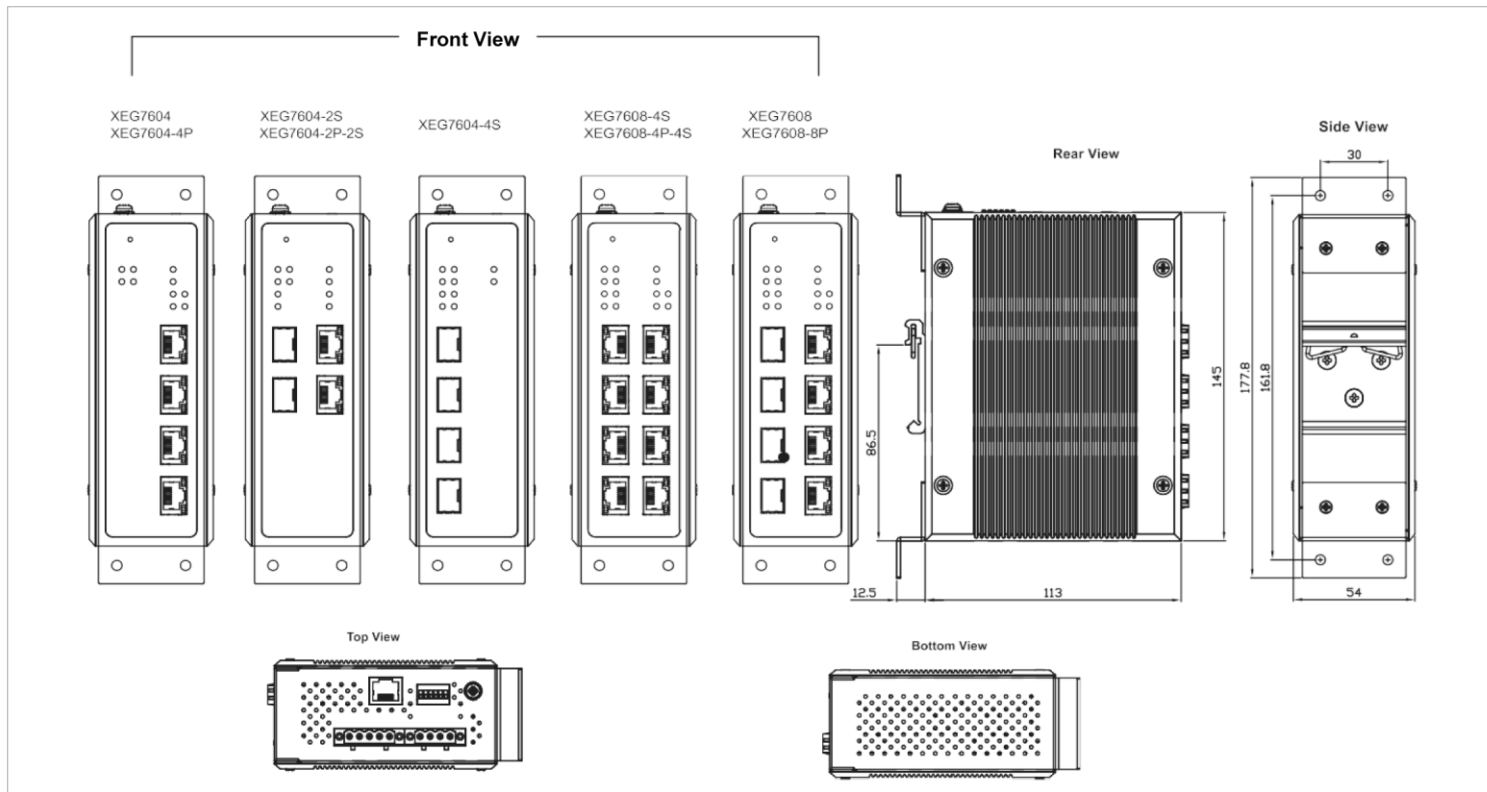
REGULATORY APPROVALS

Regulatory Approvals				
Safety	UL 60950-1 2nd Ed. /CSA C22.2 No.60950-1-07 2nd Ed. / EN 60950-1 / CB			
EMC	FCC Part 15, Subpart B, Class A EN 55032, EN 55024, EN 61000-3-2, EN 61000-3-3, EN 61000-6-2, EN 61000-6-4,			
Test	Item	Value	Level	
IEC 61000-4-2	ESD	Contact Discharge	±6KV	3
		Air Discharge	±8KV	3
IEC 61000-4-3	RS	80-1000MHz	10(V/m)	3
		1.4-2.0GHz	3(V/m)	3
		2.0-2.7GHz	10(V/m)	3
IEC 61000-4-4	EFT	AC Power Port	±2.0kV	3
		DC Power Port	±2.0kV	3
		Signal Port	±1.0kV	3
IEC 61000-4-5	Surge	DC Power Port	Line-to Line±1.0kV Line-to	3
		DC Power Port	Earth±2.0kV Line-to	3
		Signal Port	Earth±2.0kV	3
IEC 61000-4-6	CS	0.15-80MHz	10V rms	3
IEC 61000-4-8	PFMF	Enclosure	30 V/m	4
IEC 61000-4-11	DIP	AC Power Port	-	A
Shock Drop Vibration	MIL-STD-810G Method 516.5 MIL-STD-810F Method 516.5 MIL-STD-810F Method 514.5 C-1 & C-2			
Rail Traffic	EN50155 /EN50121-4			
Traffic Control	NEMA TS-2			
High Altitude	Certified for altitudes up to 4,000m, according to IEC 60068-2-13			
RoHS II	Yes			





DIMENSIONS & LAYOUT



ORDERING INFORMATION

Ordering information			
Model Name	RJ45 (non-PoE)	RJ45 (PoE)	SFP
XEG7604	4	0	0
XEG7604-4P	0	4	0
XEG7604-2S	2	0	2
XEG7604-4S	0	0	4
XEG7604-2P-2S	0	2	2
XEG7608-4P-4S	8	0	0
XEG7608-8P	0	8	0
XEG7608-4S	4	0	4
XEG7608-4P-4S	0	4	4

Optional Accessories	
Model Name	Description
XWK450-A-BK	Aluminum wall mount kit
XCC-RJ45-DB9-90-F	RJ45 to DB9 Female Cross Over Console Cable, 90cm
XDP-75-24	75W/3.2A DIN-Rail 24VDC power supply 88~264VAC / 124~370VDC input
XDP-240-48	240W/5A DIN-Rail 48VDC power supply 88~264VAC / 124~370VDC input
XTR-28-SX-550M	SFP Transceiver, 1250Mbps, 850nmVCSEL, Multi-mode, 550m, 3.3V, -20~85°C
XTR-38-SX-2K	SFP Transceiver, 1250Mbps, 1310nmFP, Multi-mode, 2km, 3.3V, -40~85°C
XTR-38-LX-10K	SFP Transceiver, 1250Mbps, 1310nmFP, Single-mode, 10km, 3.3V, -40~85°C
XTR-38-LX-30K	SFP Transceiver, 1250Mbps, 1310nmDFB, Single-mode, 30km, 3.3V, -40~85°C





WHO WE ARE

Built on 20 years of experience in designing and manufacturing industrial networking products, **Agatel** was established from the UK to serve the infrastructure and industrial sectors in EMEA markets with reliable connectivity for mission-critical systems in demanding environments.

Experienced in hardware and software design and integration, we produce high-quality yet cost-effective industrial networking and communication products with great customization capabilities and robust implementations, equipping our customers for reliable secure industrial networks.



WHAT WE OFFER

The needs of our customers' industry are different from those of corporate IT environments – industrial operating environments are tough and the impact of failure in the field can lead to business threatening situations, hence our products will have lifetimes in excess of 20 years.

From entry-level to high-performance industry-certified hardware, **Agatel** offers a full solution spectrum to suit our customers' budgets and application requirements, with features such as industrial-grade reliability, integrated security, network redundancy, and advanced performance.

Our product solution profile includes industrial Ethernet switches, network time servers, media converters, industrial wireless devices, and serial device servers, covering a wide array of mission-critical applications such as automation, security, transport, water, oil and gas, and power grids.



WHY CHOOSE US

We help our customers reduce downtime and operational costs of their industrial applications in harsh environments. Leading system integrators in EMEA rely on our niche technical expertise and product quality to increase their applications' robustness, revenues, and competitive differentiation.

Agatel ruggedized high-quality solutions are designed to deliver zero-network-downtime for harsh project demands, allowing for reliable connectivity to keep people and assets safe and secure in harsh and hazardous environments, and allowing customers to focus on growing their business.

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