

RELIABLE SECURE CONNECTIVITY

XEG7305/XEG7306/XEG7307 Series

Industrial PoE Unmanaged Gigabit Ethernet Switch





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FEATURE HIGHLIGHTS

- Up to 5 10/100/1000 BASE-T(X) ports and 2 1000 BASE-X SFP ports
- Up to 4 802.3af or 802.3at compliant PoE ports
- Support 10K Jumbo frames
- Supports 802.3az Energy Efficient Ethernet for power savings
- Works from -40°C~70°C
- Failed power input alarm contact
- Certified by UL 61010-2-201 and UL C1D2/ATEX Zone 2
- EN50155 / EN50121-4 certified for Railway and Trackside applications



PRODUCT DESCRIPTION

The XEG7305/XEG7306/XEG7307 are 5-7 Port PoE Unmanaged Gigabit Ethernet Switches designed to work in mission critical environments such as mining and heavy industry. It equips up to five 10/100/1000BASE-T(X) RJ-45 ports and up to two 100/1000 BASE-F(X) and 1000 BASE-X SFP ports. With its high performance and non-blocking switching capacity, the XRGDU Series is able to fulfill the increasing demand in industrial networking. Its PoE capability of 30W per port up to four ports simplifies the wiring in complex fields, where every cable is an added cost. The equipped terminal block provide dual redundant power inputs with Reverse Polarity Protection and relay output which allows field engineers to build up a fault alarm system. Its IP30 housing protection, wide operating temperature of -40 to 70°C and DIN-Rail mounting capacities are liable to do most industrial filed applications.

The XEG7305/XEG7306/XEG7307 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.





SPECIFICATIONS

Model Name	XEG7305	XEG7305-4P	XEG7306-1S	XEG7306-4P-1S	XEG7307-2S	XEG7307-4P-2S
Switch Properties						
Processing Scheme	Store-and-Forward					
MAC Address Table	8096					
Jumbo Frame	10K Bytes					
Packet Buffer	1 Mbits					
Ethernet						
Compliance	IEEE802.3 for 10BASE-T IEEE802.3u for 100BASE-T(X) and 100BASE-FX IEEE 802.3ab for 1000BASE-T IEEE 802.3z for 1000BASE-X IEEE 802.1Q for VLAN Tagging IEEE 802.1p for Class of Service IEEE 802.3x Flow Control IEEE 802.3af / 802.3at for Power-over-Ethernet IEEE 802.3az for Energy Efficient Ethernet					
Flow Control	Back pressure and pause frame-based flow control schemes					
LLDP	Forwarding					
Transmission Rate	10/100/1000 Mbps (the second SFP port is 1000 Mbps only)					
Auto MDI/MDI-X	Yes					
Power						
Input Voltage	12-52 VDC*					
Input Current (System)	0.5A @ 12 V			0.6A @ 12V		
Max. Power Consumption (System)	6 W			7.2 W		
Input Current (with PoE)	-	2.6A @ 51 V	-	2.6A @ 51 V	-	2.6A @ 51 V
Max. Power Consumption (with PoE)	-	130 W	-	130 W	-	130 W
Relay Output	24 V / 0.5A					
Connector	Terminal Block					
LED						
Indicators	PWR1, PWR2, Alarm, RJ45 Act/Link, SFP Link, PoE					
Physical Characteristics						
Housing	IP30 protection according to EN 60529					
Material	SECC			Aluminum		
Dimension (W x H x D)	32 x 90 x 110 mm			45.3 x 89.6 x 110 mm		
Weight	420g			350g		
Installation	DIN-rail or wall-mount (optional)					
Environmental Limits						
Operating Temperature	-40°C~70°C (-40°F~158°F)					
Storage Temperature	-40°C~85°C (-40°F~185°F)					
Ambient Relative Humidity	5%~95%, 55°C (Non-condensing)					

*802.3af PoE output starts from 43 VDC input and 802.3at output starts from 51 VDC input.





REGULATORY APPROVALS

Environmental Limits				
Safety	UL 61010-2-201, UL C1D2/ATEX Zone 2			
EMC	EN 55032 EN 61000-6-4 EN 55024 EN 61000-6-2			
Rail Traffic	EN50155 / EN50121-4			
Test	Item		Value	Level
IEC 61000-4-2	ESD	Contact Discharge	±8KV	4
		Air Discharge	±15KV	4
IEC 61000-4-3	RS	80-1000MHz	10(V/m)	3
		1.4-2.0GHz	3 (V/m)	
		2.0-2.7GHz	1(V/m)	
IEC 61000-4-4	EFT	AC Power	±2.0KV	3
		Port DC	±2.0KV	3
		Power Port	±2.0KV	4
		Signal Port	±2.0KV	
IEC 61000-4-5	Surge	AC Power	Line-to	3
		Port AC	Line±1.0KV Line-	3
		Power Port	to Earth±2.0KV	3
		DCPower	Line-to	3
		Port DC	Line±1.0KV Line-	3
Power Port	to Earth±2.0KV			
Signal Port	Line-to			
		Earth±2.0KV		
IEC 61000-4-6	CS	Conducted	10 Vrms	3
IEC 61000-4-8	PFM F	Enclosure	30 A/m	4
IEC 61000-4-11	DIP	AC Power Port	-	
Shock	MIL-STD-810F Method 516.5			
Drop	MIL-STD-810F Method 516.5			
Vibration	MIL-STD-810F Method 514.5 C-1 & C-2			
High Altitude	Certified for 4000m altitude according to IEC 60068-2-13			
RoHS	YES			
MTBF	TBD			
Warranty	5 years			





ORDERING INFORMATION

Model name	Port Configuration		
	RJ-45 (non-PoE)	RJ-45 (PoE)	SFP
XEG7305	5	0	0
XEG7305-4P	1	4	0
XEG7306-1S	5	0	1
XEG7306-4P-1S	1	4	1
XEG7307-2S	5	0	2
XEG7307-4P-2S	1	4	2



OPTIONAL ACCESSORIES

Model name	Description
XWK-315-A-BK	Aluminum Wall Mount Kit,Black (only XEG7305)
XWK-454-A-BK	Aluminum Wall Mount Kit,Black (for XEG7305-4P, XEG7306-1S and XEG7307-2S)
XDP-75-24	75W/3.2A DIN-Rail 24VDC power supply with universal 88~264VAC / 124~370VDC input
XDP-240-48	240W/5A DIN-Rail 48VDC power supply with universal 88~264VAC / 124~370VDC input
XTR-38-FM-2K	SFP Transceiver, 155Mbps, 1310nmFP, Multi-mode, 2km, 3.3V, -40~85°C
XTR-38-FS-30K	SFP Transceiver, 155Mbps, 1310nmFP, Single-mode, 30km, 3.3V, -40~85°C
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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