

RELIABLE SECURE CONNECTIVITY

XL2300 Series

5-16 Ports Industrial Unmanaged Fast Ethernet Switches





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FEATURE HIGHLIGHTS

- 5 to 16 ports of 10/100Base-T(X) Fast Ethernet — plug-and-play unmanaged operation
- Fixed 100Base-FX fibre (multimode/single-mode, SC or ST) and 100/1000 SFP or Gigabit-combo uplink options
- PoE+ models: IEEE 802.3af/at, 30 W per port, with built-in power-booster for low-voltage DC input
- Store-and-forward, non-blocking wire-speed switching
- Redundant dual DC power inputs with relay alarm, reverse-polarity and overload protection
- IP30 rugged metal housing, fanless; DIN-Rail and Wall mounting
- Wide operating temperature — STD: -10°C ~ 70°C, EOT: -40°C ~ 75°C
- 5-year warranty



PRODUCT DESCRIPTION

The Agatel XL2300 Series is a family of industrial unmanaged Fast Ethernet (10/100) switches spanning 5 to 16 ports, available in copper-only, fixed-fibre (100Base-FX), SFP and Gigabit-combo configurations, in both non-PoE and IEEE 802.3af/at PoE+ variants.

Non-PoE models run on dual redundant 12–48 VDC inputs; PoE+ models add a built-in power-booster design delivering 30 W per port from low-voltage 12–36 or 12–55 VDC supplies. Every model provides non-blocking, wire-speed store-and-forward switching with no configuration required.

Housed in fan-less IP30 rugged metal enclosures with relay alarm, reverse-polarity and overload protection, the XL2300 Series operates across -10°C ~ 70°C (Extended -40°C ~ 75°C), making it well suited to transport, surveillance, energy and factory-automation networks.



PRODUCT SPECIFICATIONS

Technology	
Standards	IEEE 802.3 10Base-T, IEEE 802.3u 100Base-TX / 100Base-FX IEEE 802.3ab 1000Base-T & 802.3z 1000Base-X (SFP / combo models) IEEE 802.3af/at Power over Ethernet (PoE models)
Processing Type	Store and Forward
Protocol	CSMA/CD
Flow Control	IEEE 802.3x flow control, back-pressure flow control
Switch Properties	
Switching Fabric	Non-blocking, wire-speed — per-model capacity (see Selection & Comparison tables)
Memory Buffer	448 Kbit (5–8 port copper / fibre models); 4 Mbit (SFP, combo and 16-port models)
MAC Table Size	2 K (copper / fibre models); 8 K (SFP & combo); 16 K (XL2316)
Jumbo Frame	9.6 Kbytes (SFP & combo models)
Transfer Rate	14,880 pps (Ethernet); 148,800 pps (Fast Ethernet); 1,488,000 pps on Gigabit combo ports
Interface	
RJ45 Ports	10/100Base-T(X); auto-negotiation, Full/Half duplex, Auto-MDI/MDI-X (count per model)
PoE (PoE models)	IEEE 802.3af/at PoE-PSE, 30 W per port, power-booster design (End-span, Mode A)
Fibre / SFP Ports	Fixed 100Base-FX — SC or ST connector, multimode 2 km / single-mode 30 km, 1310 nm 100/1000 SFP slots or Gigabit combo (per model)
LED Indicators	Power 1, Power 2, Fault; per-port Link/Activity; SFP Link/Active; PoE status (PoE models)
Relay Contact	24 VDC, 1 A resistive
Network Cable	10Base-T: 2-pair UTP/STP Cat. 3/4/5, EIA/TIA-568 100-ohm (100 m) 100Base-TX: 2-pair UTP/STP Cat. 5, EIA/TIA-568 100-ohm (100 m)
Power Requirements	
Input Voltage	Non-PoE: dual 12–48 VDC redundant PoE+: dual 12–36 VDC or 12–55 VDC redundant (per model)
Power Connection	1 removable 6-contact terminal block
Overload Current Protection	Present (slow-blow fuse)
Reverse Polarity Protection	Present
Power Consumption	3 – 12 W (switch); plus PoE power budget on PoE models — see Selection & Comparison
Mechanical Characteristics	
Housing	Metal, IP30 protection
Dimensions (W × H × D)	30×140×95 / 30×142×99 / 46×142×99 mm by model (see Selection & Comparison)

Weight	Per model — see Selection & Comparison
Mounting	DIN-Rail Mounting, Wall Mounting
Environmental Limits	
Operating Temperature	STD: -10°C ~ 70°C (14°F ~ 158°F) EOT (-T): -40°C ~ 75°C (-40°F ~ 167°F)
Storage Temperature	-40°C ~ 85°C (-40°F ~ 185°F)
Ambient Relative Humidity	5 to 95% (non-condensing)
Regulatory Approvals	
EMI	FCC Part 15 Subpart B Class A; CE EN55032 / EN61000-6-4 Class A (EN55022 on earlier models)
EMS	CE EN55035 / EN61000-6-2 Class A (EN55024 on earlier models): IEC 61000-4-2 (ESD), -4-3 (RS), -4-4 (EFT), -4-5 (Surge), -4-6 (CS), -4-8 (Magnetic Field)
Free Fall / Shock / Vibration	IEC 60068-2-32 / IEC 60068-2-27 / IEC 60068-2-6
Green	RoHS Compliant
Safety	UL 61010-1, UL 61010-2-201 (UL 508 on earlier models); ISA 12.12.01
Compliance	NEMA TS2 (ITS) — EoT version
Warranty	5 Years
Packet Contents	
In the Box	Ethernet switch × 1 Wall-mount installation kit × 2 Quick installation guide (printed) × 1

NOTE: Due to continuous improvement, all product specifications are subject to change without notice.



SELECTION & COMPARISON — NON-PoE (XL23xx)

All models dual 12–48 VDC. Fibre suffixes: FM = multimode SC (2 km) · FS = single-mode SC (30 km) · -ST = ST connector. Every model is also available as an Extended-temperature (-T) version (-40°C ~ 75°C).

Model	10/100 Ports	Fibre / SFP / Combo	Switching Fabric	Memory / MAC	Power	Dimensions W×H×D (mm)
XL2305	5	–	Non-blocking	448 Kbit / 2K	3 W	30×140×95
XL2305-FM / -FS / -FM-ST / -FS-ST	4	1 × 100Base-FX	Non-blocking	448 Kbit / 2K	5 W	30×142×99
XL2306-2FM / -2FS / -2FM-ST / -2FS-ST	4	2 × 100Base-FX	1.2 Gbps	448 Kbit / 2K	6 W	30×142×99
XL2307-2S	5	2 × 100/1000 SFP	5 Gbps	4 Mbit / 8K	8 W	30×142×99
XL2308	8	–	1.6 Gbps	448 Kbit / 2K	3.5 W	30×140×95
XL2310-2S	8	2 × Gigabit combo	5.6 Gbps	4 Mbit / 8K	12 W	46×142×99
XL2316	16	–	3.2 Gbps	4 Mbit / 16K	3.5 W	46×142×99



SELECTION & COMPARISON — PoE+ (XL23xx-nP)

IEEE 802.3af/at, 30 W per port, power-booster design. The XL2306-4P-2FM group is an 8-port chassis with 6 PoE+ ports. All PoE+ models are also available as -T (Extended-temperature) versions.

Model	PoE+ Ports	Other Ports	Switching Fabric	Input Voltage	PoE Max. Power Budget
XL2305-4P	4	1 × 10/100	Non-blocking	12–36 VDC	90–120 W
XL2305-4P-FM / -FS / -FM-ST / -FS-ST	4	1 × 100Base-FX	Non-blocking	12–36 VDC	90–120 W
XL2306-4P-2FM / -2FS / -2FM-ST / -2FS-ST	4	2 × 100Base-FX	Non-blocking	12–36 VDC	90–120 W
XL2307-4P-2S	4	1 × 10/100 + 2 × SFP	5 Gbps	12–55 VDC	60 W@12V / 120 W@36–55V
XL2308-8P	8	–	1.6 Gbps	12–36 VDC	90 W@12V / 200 W@36V
XL2310-8P-2S	8	2 × Gigabit combo	5.6 Gbps	12–55 VDC	60 W@12V / 200 W@36–55V



ORDERING INFORMATION — NON-PoE

Order Code	Description
XL2305	5-Port Industrial Unmanaged Fast Ethernet Switch — 5 × 10/100Base-T(X), 12–48 VDC, -10°C ~ 70°C
XL2305-T	5-Port Industrial Unmanaged Fast Ethernet Switch — 5 × 10/100Base-T(X), 12–48 VDC, -40°C ~ 75°C (Extended)
XL2305-FM	5-Port Industrial Unmanaged Fast Ethernet Switch — 4 × 10/100Base-T(X) + 1 × 100Base-FX (multimode, SC, 2 km), 12–48 VDC, -10°C ~ 70°C
XL2305-FM-T	5-Port Industrial Unmanaged Fast Ethernet Switch — 4 × 10/100Base-T(X) + 1 × 100Base-FX (multimode, SC, 2 km), 12–48 VDC, -40°C ~ 75°C (Extended)
XL2305-FS	5-Port Industrial Unmanaged Fast Ethernet Switch — 4 × 10/100Base-T(X) + 1 × 100Base-FX (single-mode, SC, 30 km), 12–48 VDC, -10°C ~ 70°C
XL2305-FS-T	5-Port Industrial Unmanaged Fast Ethernet Switch — 4 × 10/100Base-T(X) + 1 × 100Base-FX (single-mode, SC, 30 km), 12–48 VDC, -40°C ~ 75°C (Extended)
XL2305-FM-ST	5-Port Industrial Unmanaged Fast Ethernet Switch — 4 × 10/100Base-T(X) + 1 × 100Base-FX (multimode, ST, 2 km), 12–48 VDC, -10°C ~ 70°C
XL2305-FM-ST-T	5-Port Industrial Unmanaged Fast Ethernet Switch — 4 × 10/100Base-T(X) + 1 × 100Base-FX (multimode, ST, 2 km), 12–48 VDC, -40°C ~ 75°C (Extended)
XL2305-FS-ST	5-Port Industrial Unmanaged Fast Ethernet Switch — 4 × 10/100Base-T(X) + 1 × 100Base-FX (single-mode, ST, 30 km), 12–48 VDC, -10°C ~ 70°C
XL2305-FS-ST-T	5-Port Industrial Unmanaged Fast Ethernet Switch — 4 × 10/100Base-T(X) + 1 × 100Base-FX (single-mode, ST, 30 km), 12–48 VDC, -40°C ~ 75°C (Extended)
XL2306-2FM	6-Port Industrial Unmanaged Fast Ethernet Switch — 4 × 10/100Base-T(X) + 2 × 100Base-FX (multimode, SC, 2 km), 12–48 VDC, -10°C ~ 70°C
XL2306-2FM-T	6-Port Industrial Unmanaged Fast Ethernet Switch — 4 × 10/100Base-T(X) + 2 × 100Base-FX (multimode, SC, 2 km), 12–48 VDC, -40°C ~ 75°C (Extended)
XL2306-2FS	6-Port Industrial Unmanaged Fast Ethernet Switch — 4 × 10/100Base-T(X) + 2 × 100Base-FX (single-mode, SC, 30 km), 12–48 VDC, -10°C ~ 70°C
XL2306-2FS-T	6-Port Industrial Unmanaged Fast Ethernet Switch — 4 × 10/100Base-T(X) + 2 × 100Base-FX (single-mode, SC, 30 km), 12–48 VDC, -40°C ~ 75°C (Extended)
XL2306-2FM-ST	6-Port Industrial Unmanaged Fast Ethernet Switch — 4 × 10/100Base-T(X) + 2 × 100Base-FX (multimode, ST, 2 km), 12–48 VDC, -10°C ~ 70°C
XL2306-2FM-ST-T	6-Port Industrial Unmanaged Fast Ethernet Switch — 4 × 10/100Base-T(X) + 2 × 100Base-FX (multimode, ST, 2 km), 12–48 VDC, -40°C ~ 75°C (Extended)
XL2306-2FS-ST	6-Port Industrial Unmanaged Fast Ethernet Switch — 4 × 10/100Base-T(X) + 2 × 100Base-FX (single-mode, ST, 30 km), 12–48 VDC, -10°C ~ 70°C
XL2306-2FS-ST-T	6-Port Industrial Unmanaged Fast Ethernet Switch — 4 × 10/100Base-T(X) + 2 × 100Base-FX (single-mode, ST, 30 km), 12–48 VDC, -40°C ~ 75°C (Extended)
XL2307-2S	7-Port Industrial Unmanaged Fast Ethernet Switch — 5 × 10/100Base-T(X) + 2 × 100/1000 SFP, 12–48 VDC, -10°C ~ 70°C
XL2307-2S-T	7-Port Industrial Unmanaged Fast Ethernet Switch — 5 × 10/100Base-T(X) + 2 × 100/1000 SFP, 12–48 VDC, -40°C ~ 75°C (Extended)
XL2308	8-Port Industrial Unmanaged Fast Ethernet Switch — 8 × 10/100Base-T(X), 12–48 VDC, -10°C ~ 70°C
XL2308-T	8-Port Industrial Unmanaged Fast Ethernet Switch — 8 × 10/100Base-T(X), 12–48 VDC, -40°C ~ 75°C (Extended)
XL2310-2S	10-Port Industrial Unmanaged Fast Ethernet Switch — 8 × 10/100Base-T(X) + 2 × Gigabit combo (2×10/100/1000 + 2×100/1000 SFP), 12–48 VDC, -10°C ~ 70°C
XL2310-2S-T	10-Port Industrial Unmanaged Fast Ethernet Switch — 8 × 10/100Base-T(X) + 2 × Gigabit combo (2×10/100/1000 + 2×100/1000 SFP), 12–48 VDC, -40°C ~ 75°C (Extended)
XL2316	16-Port Industrial Unmanaged Fast Ethernet Switch — 16 × 10/100Base-T(X), 12–48 VDC, -10°C ~ 70°C
XL2316-T	16-Port Industrial Unmanaged Fast Ethernet Switch — 16 × 10/100Base-T(X), 12–48 VDC, -40°C ~ 75°C (Extended)



ORDERING INFORMATION — PoE+

Order Code	Description
XL2305-4P	5-Port Industrial Unmanaged Fast Ethernet PoE+ Switch — 4 × 10/100Base-T(X) PoE+ (30 W/port) + 1 × 10/100Base-T(X), 12–36 VDC, -10°C ~ 70°C
XL2305-4P-T	5-Port Industrial Unmanaged Fast Ethernet PoE+ Switch — 4 × 10/100Base-T(X) PoE+ (30 W/port) + 1 × 10/100Base-T(X), 12–36 VDC, -40°C ~ 75°C (Extended)
XL2305-4P-FM	5-Port Industrial Unmanaged Fast Ethernet PoE+ Switch — 4 × 10/100 PoE+ (30 W/port) + 1 × 100Base-FX (multimode, SC, 2 km), 12–36 VDC, -10°C ~ 70°C
XL2305-4P-FM-T	5-Port Industrial Unmanaged Fast Ethernet PoE+ Switch — 4 × 10/100 PoE+ (30 W/port) + 1 × 100Base-FX (multimode, SC, 2 km), 12–36 VDC, -40°C ~ 75°C (Extended)
XL2305-4P-FS	5-Port Industrial Unmanaged Fast Ethernet PoE+ Switch — 4 × 10/100 PoE+ (30 W/port) + 1 × 100Base-FX (single-mode, SC, 30 km), 12–36 VDC, -10°C ~ 70°C
XL2305-4P-FS-T	5-Port Industrial Unmanaged Fast Ethernet PoE+ Switch — 4 × 10/100 PoE+ (30 W/port) + 1 × 100Base-FX (single-mode, SC, 30 km), 12–36 VDC, -40°C ~ 75°C (Extended)
XL2305-4P-FM-ST	5-Port Industrial Unmanaged Fast Ethernet PoE+ Switch — 4 × 10/100 PoE+ (30 W/port) + 1 × 100Base-FX (multimode, ST, 2 km), 12–36 VDC, -10°C ~ 70°C
XL2305-4P-FM-ST-T	5-Port Industrial Unmanaged Fast Ethernet PoE+ Switch — 4 × 10/100 PoE+ (30 W/port) + 1 × 100Base-FX (multimode, ST, 2 km), 12–36 VDC, -40°C ~ 75°C (Extended)
XL2305-4P-FS-ST	5-Port Industrial Unmanaged Fast Ethernet PoE+ Switch — 4 × 10/100 PoE+ (30 W/port) + 1 × 100Base-FX (single-mode, ST, 30 km), 12–36 VDC, -10°C ~ 70°C
XL2305-4P-FS-ST-T	5-Port Industrial Unmanaged Fast Ethernet PoE+ Switch — 4 × 10/100 PoE+ (30 W/port) + 1 × 100Base-FX (single-mode, ST, 30 km), 12–36 VDC, -40°C ~ 75°C (Extended)
XL2306-4P-2FM	6-Port Industrial Unmanaged Fast Ethernet PoE+ Switch — 4 × 10/100 PoE+ (30 W/port) + 2 × 100Base-FX (multimode, SC, 2 km), 12–36 VDC, -10°C ~ 70°C
XL2306-4P-2FM-T	6-Port Industrial Unmanaged Fast Ethernet PoE+ Switch — 4 × 10/100 PoE+ (30 W/port) + 2 × 100Base-FX (multimode, SC, 2 km), 12–36 VDC, -40°C ~ 75°C (Extended)
XL2306-4P-2FS	6-Port Industrial Unmanaged Fast Ethernet PoE+ Switch — 4 × 10/100 PoE+ (30 W/port) + 2 × 100Base-FX (single-mode, SC, 30 km), 12–36 VDC, -10°C ~ 70°C
XL2306-4P-2FS-T	6-Port Industrial Unmanaged Fast Ethernet PoE+ Switch — 4 × 10/100 PoE+ (30 W/port) + 2 × 100Base-FX (single-mode, SC, 30 km), 12–36 VDC, -40°C ~ 75°C (Extended)
XL2306-4P-2FM-ST	6-Port Industrial Unmanaged Fast Ethernet PoE+ Switch — 4 × 10/100 PoE+ (30 W/port) + 2 × 100Base-FX (multimode, ST, 2 km), 12–36 VDC, -10°C ~ 70°C
XL2306-4P-2FM-ST-T	6-Port Industrial Unmanaged Fast Ethernet PoE+ Switch — 4 × 10/100 PoE+ (30 W/port) + 2 × 100Base-FX (multimode, ST, 2 km), 12–36 VDC, -40°C ~ 75°C (Extended)
XL2306-4P-2FS-ST	6-Port Industrial Unmanaged Fast Ethernet PoE+ Switch — 4 × 10/100 PoE+ (30 W/port) + 2 × 100Base-FX (single-mode, ST, 30 km), 12–36 VDC, -10°C ~ 70°C
XL2306-4P-2FS-ST-T	6-Port Industrial Unmanaged Fast Ethernet PoE+ Switch — 4 × 10/100 PoE+ (30 W/port) + 2 × 100Base-FX (single-mode, ST, 30 km), 12–36 VDC, -40°C ~ 75°C (Extended)
XL2307-4P-2S	7-Port Industrial Unmanaged Fast Ethernet PoE+ Switch — 4 × 10/100 PoE+ (30 W/port) + 1 × 10/100 + 2 × 100/1000 SFP, 12–55 VDC, -10°C ~ 70°C
XL2307-4P-2S-T	7-Port Industrial Unmanaged Fast Ethernet PoE+ Switch — 4 × 10/100 PoE+ (30 W/port) + 1 × 10/100 + 2 × 100/1000 SFP, 12–55 VDC, -40°C ~ 75°C (Extended)
XL2308-8P	8-Port Industrial Unmanaged Fast Ethernet PoE+ Switch — 8 × 10/100Base-T(X) PoE+ (30 W/port), 12–36 VDC, -10°C ~ 70°C
XL2308-8P-T	8-Port Industrial Unmanaged Fast Ethernet PoE+ Switch — 8 × 10/100Base-T(X) PoE+ (30 W/port), 12–36 VDC, -40°C ~ 75°C (Extended)

Order Code	Description
XL2310-8P-2S	10-Port Industrial Unmanaged Fast Ethernet PoE+ Switch — 8 × 10/100 PoE+ (30 W/port) + 2 × Gigabit combo (2×10/100/1000 + 2×100/1000 SFP), 12–55 VDC, -10°C ~ 70°C
XL2310-8P-2S-T	10-Port Industrial Unmanaged Fast Ethernet PoE+ Switch — 8 × 10/100 PoE+ (30 W/port) + 2 × Gigabit combo (2×10/100/1000 + 2×100/1000 SFP), 12–55 VDC, -40°C ~ 75°C (Extended)

Optional accessories — industrial DIN-Rail power supplies (HDR / MDR / EDR / NDR / SDR series) and 100 Mbps / 1 Gbps multi-mode, single-mode, BiDi and copper SFP transceiver modules — are available; contact Agatel for the current accessory list.



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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