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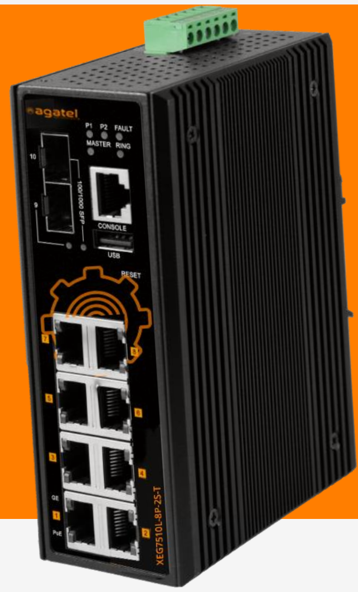
XLG7510 Series

10-Port Light L3 Industrial Managed Gigabit PoE Switch



XLG7510 Series

10-Port Light L3 Industrial Managed Gigabit PoE Switch

FEATURE HIGHLIGHTS

- 8-port 10/100/1000Base-T(X) Ethernet with IEEE 802.3af/at compliant PoE+ (30W/port)
- 2-port dual rate 100/1000Base-(F)X SFP slots
- Multiusers account for security
- Configuration: http, https, CLI Command, Telnet, SNMP, SSH
- Network redundancy support: G.8032 ERPS v2/STP/RSTP/MSTP
- Supports IP route for routing function
- Supports RADIUS, TACACS+ authentication protocol
- Supports QoS, LACP bandwidth control
- Supports VLAN, SNMP v1/v2c/v3, ACL, IP source guard for Ethernet security
- PoE ping alarm function for PoE ports power recycle
- Redundant power inputs design
- Operating temperature range - STD: -10°C ~65°C, EOT: -40°C ~ 75°C

PRODUCT DESCRIPTION

AGATEL XLG7510 Series are 10-port full gigabit managed PoE Ethernet switch, which provides 8*10/100/1000 Base-T(X) with IEEE 802.3 af/at PoE compliant and 2*100/1000 Base-(F)X SFP slots. XEG7510L Series are full manageable Layer-2 Ethernet switch series, and supporting power inputs redundancy and PoE function with 30W per port output. XLG7510 Series offers standardized network redundancy ITU-T G.8032 ERPS v2 (Ethernet Ring Protection Switch) protocol, providing <50ms recovery time to the network, to give user the chance to choose your Ethernet switch but not tied up with particular brand's product.

XLG7510 Series provides comprehensive network security and management capability by supporting Multiusers account, IGMP, GVRP, VLAN, QoS, SNMP, RADIUS, TACACS+, Aggregation (Static, LACP), SSH, SSL, IP source guard to create a highly-secured network environment. Besides, supporting PoE ping alarm function allows user to reboot the powered device remotely when it suffered a malfunction. For power saving purpose, assuring PD priority and enhancing security level of the network, XLG7510 Series also supports PoE scheduling and PoE output limit function to set up PoE output duration and watt at will.

XLG7510 Series as an industrial Ethernet switch product line, is designed to withstand harsh and extreme environment conditions. With fan less design, XLG7510 still manage to be applied in extremely polarized temperature, from -40oC to 75oC, making it the best choice in various industrial applications.

PRODUCT SPECIFICATIONS

Hardware Platform	
Standards	IEEE 802.3 10Base-T Ethernet IEEE 802.3u 100Base-TX and 100Base-FX Fast Ethernet IEEE 802.3ab 1000Base-T Gigabit Ethernet IEEE 802.3z 1000Base-X Gigabit Fiber IEEE 802.3af/at Power over Ethernet IEEE 802.3x Flow Control IEEE 802.1d STP (Spanning Tree Protocol) IEEE 802.1w RSTP (Rapid Spanning Tree Protocol) IEEE 802.1s MSTP (Multiple Spanning Tree Protocol) ITU-T G.8032 / Y.1344 ERPS v1/v2(Ethernet Ring Protection Switch) IEEE 802.1Q Virtual Local Area Network (VLAN) IEEE 802.1p QoS/CoS Protocol for Traffic Prioritization IEEE 802.1X Network Authentication IEEE 802.1AB Link Layer Discovery Protocol (LLDP) IEEE 802.3ad Link Aggregation (LACP)
Processing Type	Store and Forward
Flow Control	IEEE 802.3x flow control, back pressure flow control

Network Management	
Management	IPv4/IPv6, SNMP v1/v2c/v3, LLDP, LLDP-MED, HTTP, HTTPS, SSHv2 telnet, DHCP client, DHCPv6 client, DHCP server, Port Mirror, DNS client/proxy, IP based Access Filter, ICMPv6, syslog, Time Zone /Daylight Saving, NTP client, RMON, sFlow, Loop detection, Console Port, Power lost warning, relay trigger
Security	Port-based/Single/Multi 802.1X, ACL(Port/Rate Limiters/ACE), MACbased Authentication, VLAN assignment, QoS Assignment, Private VLAN, Guest VLAN, RADIUS accounting, TACACS+, IP MAC binding, WEB/CLI authentication, Authorization (15 levels), Port Security Limit Control, ACLs for filtering/policing/port copy, IP source guard, ARP Inspection
L2 Switching	Port/MAC/Protocol/IP Subnet-based VLAN, GARP/GVRP, Loop Guard, Link Aggregation static/LACP, BPDU guard, Error disable recovery, IGMP snooping v2/v3, MLD snooping v1/v2, IGMP filtering, IPMC throttling / filtering leave proxy, DHCP snooping, G.8032 v1/v2
L3 Switching	DHCP option82, IP route
QoS	802.1p Queueing, Input priority mapping, Storm control for Unicast/Multicast/Broadcast, Port/Queue/ACL policer, Port egress shaper, Queue egress shaper, DiffServ (DSCP), Tag remarking, Scheduler mode
Power Saving	ActiPHY, PerfectReach, IEEE 802.3az EEE power management
Network Redundancy	STP/RSTP/MSTP, port trunk with LACP, ERPS v1/v2(<50ms)
Configuration	Http, Https, Telnet, SSH, CLI, TFTP, SNMP v3
PoE	POE/POE+ port power allocation, Power budget protection, PoE output scheduled, PoE alive check and remote reboot PD device
System / Diagnostics	Dual Image Protection, PING, PING6

SNMP MIBs & RFC Standards	RFC 2674 VLAN MIB IEEE-802.1Q bridge MIB 2008 RFC 2819 RMON (group 1, 2, 3, and 9) RFC 1213 MIB II RFC 1215 TRAPS RFC 4188 bridge RFC 4292 IP forwarding table RFC 4293 management information base for the Internet Protocol (IP) RFC 5519 multicast group membership discovery RFC 4668 RADIUS auth. client RFC 4670 RADIUS accounting RFC 3635 Ethernet-like RFC 2863 interface group MIB using SMI v2 RFC 3636 802.3 MAU RFC 4133 entity MIB v3 RFC 3411 SNMP management frameworks RFC 3414 user-based security model for SNMPv3 RFC 3415 view-based access control model for SNMP RFC 2613 SMON – PortCopy IEEE 802.1 MSTP IEEE 802.1AB LLDP-MIB (LLDP MIB included in a clause of the STD) IEEE 802.3ad (LACP MIB included in a clause of the STD) IEEE 802.1X (PAE MIB included in a clause of the STD) TIA 1057 LLDP-MED (MIB is part of the STD) RFC 3621 LLDP-MED Power (POE) (No specific MIB for POE+ exists)
Switch Properties	
Back-Plane (Switching Fabric	20Gbps
Priority Queues	8
Max. Number of VLANs	4095
VLAN ID Range	VID 1 to 4095
Memory Buffer	4Mbits
Jumbo Frame	9.6Kbytes
MAC Table Size	8K
IGMP Group	1024
Transfer Rate	14,880pps for Ethernet port 148,800pps for Fast Ethernet port 1,488,000pps for Gigabit Ethernet port
Interface	
RJ45 Ports	8*10/100/1000Base-T(X) with PoE+, auto negotiation speed, Full/Half duplex mode, and auto MDI/MDI-X connection
PoE Pin Out	V+, V+, V-, V-, for pin 1, 2, 3, 6 (End-span, Mode A)
Fiber Port	2*100/1000Base-(F)X SFP slots
Wavelength	Depends on SFP modules
LED Indicators	System: Power 1, Power 2, Master, Ring, Fault Ethernet ports: Speed/Link/Active PoE: On-connected to PD devices SFP: Link/Active
RS232 Serial Console	1*RS232 in RJ45 connector with console cable, baud rate 115,200bps,8,N,1
Relay Contact	24 VDC, 1A resistive
Network Cable	10Base-T: 2-pair UTP/STP Cat. 3, 4, 5 cable EIA/TIA-568 100-ohm (100m) 100Base-TX: 2-pair UTP/STP Cat. 5 cable EIA/TIA-568 100-ohm (100m) 1000Base-T: 4-pair UTP/STP Cat.5/5E cable; EIA/TIA-568 100-ohm (100m)

Optical Cable	Multi-mode cable - 50/125um or 62.5/125um, Single-mode cable - 9/125um or 10/125um

Power Requirements	
Input Voltage	XLG7510-8P-2S(-T): dual 48-55VDC redundant power inputs XLG7510-8P-2S-24(-T): dual 12-55VDC redundant power inputs
Power Connection	1 removable 6-contact terminal block
Overload Current Protection	Present (Slow-Blow Fuse)
Reverse Polarity Protection	Present
System Power Consumption	Max. 15W full loading
Max. PoE Power Budget	XLG7510-8P-2S(-T): 240W@48-55VDC XLG7510-8P-2S-24(-T): 90W@12VDC, 180W@24VDC, 240W@48-55VDC
PoE Power Output	30W max. per PoE port
Mechanical Characteristics	
Housing	Metal, IP30 protection
Dimensions (W x H x D)	54 x 142 x 99 mm (2.13 x 5.59 x 3.9 inch)
Weight	XLG7510-8P-2S-(T): Unit weight: 0.89kg (1.97 lb), Shipping weight: 1.25kg (2.76 lb) XLG7510-8P-2S-24(-T): Unit weight: 0.94kg (2.07 lb), Shipping weight: 1.3kg (2.87 lb)
Mounting	DIN-Rail Mounting, Wall Mounting
Environmental Limits	
Operating Temperature	STD: -10°C ~ 70°C EOT: -40°C ~ 75°C
Storage Temperature	-40°C ~ 85°C
Ambient Relative Humidity	5 to 95%, (non-condensing)
Regulatory Approvals	
EMI	FCC Part 15 Subpart B Class A, CE EN55022/EN61000-6-4 Class A
EMS	CE EN55024/EN61000-6-2 Class A: IEC61000-4-2 (ESD), IEC61000-4-3 (RS), IEC61000-4-4 (EFT), IEC61000-4-5 (Surge), IEC61000-4-6 (CS), IEC61000-4-8 (Magnetic Field)
Free Fall	IEC60068-2-32
Shock	IEC60068-2-27
Vibration	Vibration IEC60068-2-6
Green	RoHS Compliant
Safety	UL61010-1, UL61010-2-201, ISA 12.12.01 C1D2, ATEX Zone 2 Ex nA nC IIC T4 GC
Corrosion Protection	NOTE. For XLG7510-8P-2S(-T) series only IEC 60068-2-11, IEC 60068-2-52, IEC 60068-2-60 IPC-CC-830B, MIL-I-46058C, IEC 61086-2 (Class 2), UL 94, UL 746E ISO 9223 (Class C5-Very High, Class CX-Extreme) ANSI/ISA 71.04 (Class GX-Severe)
Compliance	NEMA TS2 (ITS)–EoT version (XLG7510-8P-2S-24(-T) Series only)
MTBF (Telcordia SR-332, Issue 3, GB, 25oC)	XLG7510-8P-2S: 456,578 hrs. XLG7510-8P-2S-24: 442,020 hrs
Warranty	5 Years

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

Packet Contents

- 1 XLG7510-8P-2S (-24)(-T) Ethernet switch
- 1 RJ45 (Male) to DB-9 RS-232 (Female) serial console cable
- 2 Wall-mount installation kits
- 1 Quick installation guide (printed)

Comparison Table

Model Name	10/100/1000 Base-T(X) /PoE+	100/1000 Base-(F)X SFP	Power Inputs	PoE Max. Power Budget	Operating Temperature
XLG7510-2S	8	2	12-48VDC	15W	-10°C ~ 70°C
XLG7510-2S-T	8	2	12-48VDC	15W	-40°C ~ 75°C
XLG7510-8P-2S	8/P	2	48-55VDC	240W	-10°C ~ 70°C
XLG7510-8P-2S-T	8/P	2	48-55VDC	240W	-40°C ~ 75°C
XLG7510-8P-2S-24	8/P	2	12-55VDC	90W@12VDC 180W@24VDC 240W@48-55VDC	-10°C ~ 70°C
XLG7510-8P-2S-24-T	8/P	2	12-55VDC	90W@12VDC 180W@24VDC 240W@48-55VDC	-40°C ~ 75°C

ORDERING INFORMATION

XLG7510 Series	
XLG7510-2S	10-Port Industrial Gigabit Managed Ethernet Switch - 8*10/100/1000Base-T(X) + 2*100/1000Base-(F)X SFP Slot, Standard Operating Temperature: -10° to 70° C
XLG7510-2S-T	10-Port Industrial Gigabit Managed Ethernet Switch - 8*10/100/1000Base-T(X) + 2*100/1000Base-(F)X SFP Slot, Extended Operating Temperature: -40° to 75° C
XLG7510-8P-2S	10-Port Industrial Gigabit PoE+ Managed Ethernet Switch - 8*10/100/1000Base-T(X) with PoE Injector (30W/Port) + 2*100/1000Base-(F)X SFP Slot, Standard Operating Temperature: -10° to 70° C
XLG7510-8P-2S-T	10-Port Industrial Gigabit PoE+ Managed Ethernet Switch - 8*10/100/1000Base-T(X) with PoE Injector (30W/Port) + 2*100/1000Base-(F)X SFP Slot, Extended Operating Temperature: -40° to 75° C
XLG7510-8P-2S-24	10-Port Industrial Gigabit PoE+ Managed Ethernet Switch - 8*10/100/1000Base-T(X) with PoE Injector (30W/Port) + 2*100/1000Base-(F)X SFP Slot, Booster Version, Standard Operating Temperature: -10° to 70° C
XLG7510-8P-2S-24-T	10-Port Industrial Gigabit PoE+ Managed Ethernet Switch - 8*10/100/1000Base-T(X) with PoE Injector (30W/Port) + 2*100/1000Base-(F)X SFP Slot, Booster Version, Extended Operating Temperature: -40° to 75° C

Optional Accessories – Power Supply Series	
SDR-120-48	Industrial DIN rail power supply; Output 48Vdc at 2.5A; Metal casing; Ultra slim width 40mm
SDR-240-48	Industrial DIN rail power supply; Output 48Vdc at 5A; Metal casing; Ultra slim width 63mm
MDR-20-24	Industrial DIN rail power supply; Output 24Vdc at 1A; plastic casing

Optional Accessories – SFP Transceiver Series	
XTR-28-SX-550M	SFP Transceiver, 1250Mbps, 850nm, Multi-mode, 550m, 3.3V, -40~85°C, DDMI
XTR-38-SX-2K	SFP Transceiver, 1250Mbps, 1310nm, Multi-mode, 2km, 3.3V, -40~85°C, DDMI
XTR-38-LX-10K	SFP Transceiver, 1250Mbps, 1310nm, Single-mode, 10km, 3.3V, -40~85°C, DDMI
XTR-38-LX-20K	SFP Transceiver, 1250Mbps, 1310nm, Single-mode, 20km, 3.3V, -40~85°C, DDMI

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.

Agatel Ltd

1st Floor, Apex House
Calthorpe Road, Edgbaston
Birmingham B15 1TR
United Kingdom

Tel: +44 203 488 6888
E-mail: info@agatel.co.uk
Website: www.agatel.co.uk