

GL5080XR

16 Port Industrial 10G Managed L3 Ethernet Switch

The GL5080XR Industrial L3 Ethernet Switch from Actelis Networks® is a high density hardened, fanless fiber fed switch able to support 12 high speed SFP 10GE interfaces and 4 RJ45 gigabit interfaces per device.

The GL5080XR is part of Actelis' DIN Rail family of access switching products designed for industrial, intelligent traffic network, surveillance, pipeline and utility applications. The GL5080XR is a cost optimized, managed 10GE switch supporting multiple 1/10 gigabit Ethernet connections that allow multiple sensors or cameras at various locations to be connected in a linear chain, MSTP/RSTP/STP mesh or Fast healing ERPS ring configurations.

The GL5080XR offers wire-speed switching across 16 ports, featuring an extremely small factor, fanless design, and DIN rail mounting, the GL5080XR is ideal for deployment in almost any traffic, utility, or industrial networks.

The GL5080XR also supports L3 functionality including Static Routing, RIP, OSPF and VRRP.

Environmentally hardened with redundant power inputs, and featuring a robust, field-proven design, the unit is protected against over voltage and over current conditions, ensuring high reliability and trouble-free operation.

Interoperable with any standard Ethernet switch, router or hub the GL5080XR device seamlessly integrates into any Ethernet network. The GL5080XR is equipped with 12 10GE Small

Form-Factor Pluggable (SFP+) ports, and 4 RJ45 GE ports. The GL5080XR allows assignment of a service/device per port.

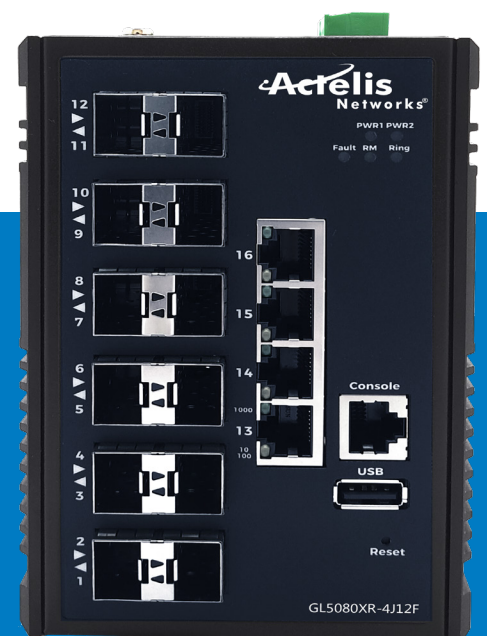
The GL5080XR incorporates a comprehensive set of mechanisms that include high level authentication, advanced encryption capabilities, as well as sophisticated filtering and access control using layer 2 processes.

The GL5080XR provides 802.1q VLAN-aware wire-speed bridging, double tagging (VLAN stacking) for end-user VLAN transparency, L2 (Ethernet priority) classification with eight queues per port, fast healing rings, MSTP/RSTP/STP, Dynamic Link Aggregation, bandwidth monitoring, Multicast/Broadcast limiting, as well as IGMP bandwidth snooping for video distribution applications.

The GL5080XR can be managed through Actelis' MetaASSIST EMS multi-platform Element Management System*. Various user interfaces/protocols are supported including a WEB based GUI, Cisco Like CLI as well as SNMP MIBs enabling seamless integration with third-party Network Management Systems (NMS).

Highlights

- **High Density Managed** 10GE switch – 16 ports
- **Industrial Design** - Harsh environments, wide temperature range compact IP30
- **Flexible Network Redundancy** - RSTP, MSTP, ERPS, LACP
- **Advanced Traffic Management** - QoS- CoS, DSCP, WRR/SPQ Queuing, Storm Protection
- **L2 wire speed switching** , 9K Jumbo frames
- **L3 Routing capabilities** - RIP, OSPF, VRRP
- **Multicasting** - IGMP Snooping - v1/v2/v3, up to 512 groups
- **Advanced Security:** IEEE 802.1x, RADIUS & TACACS+
- **SNMP** v1/v2c/v3
- **Easy Deployment / Configuration** - USB storage, configuration-free replacement
- **Industrial automation protocols** Ethernet/IP and Modbus TCP
- **Superior Reliability and Availability**



GL5080XR

Specifications

Interfaces

Ethernet (Network/User) -

- **10/100/1000Base-T**: 4 ports
Connector: RJ45, Auto-MDI/MDI-X
- **10GE SFP+**: 12 ports
Connector: SFP, MSA compliant

Management (out-of-band)

- **Console/Craft**: RS-232
Connector: RJ-45
- **Storage**- Firmware update, configuration backup, restore, boot up and syslog
Connector: USB 2.0

Alarm Contacts

- Terminal Block, 1 input, 1 output

LAN Protocols

- **Ethernet operating mode**: Store & forward, L2 wire-speed/non-blocking
- **MAC addresses**: 32K
- **Jumbo frames**: 9K Bytes
- **Flow control**: IEEE 802.3x (Full Duplex) and Back-Pressure(Half Duplex)
- **Max VLANs**: 4094
- **VLAN Types**: Port-based VLANs
- **VLAN Tagging**: IEEE 802.1Q
- **Double Tagging**: Q-in-Q IEEE 802.1ad
- **Multicast**: IGMP V1/V2 up to 512 multicast groups, IGMP snooping and querying, Throttling and filtering.
- **Discovery Mechanisms**: LLDP IEEE 802.1ab

Redundancy

- **Ring**: ERPSv2
- **Spanning Tree Protocol**: STP - IEEE 802.1D, RSTP IEEE 802.1w, MSTP IEEE 802.1s
- **Link Aggregation with LACP**
Static or Dynamic

L3 Protocols

- **Static Routing**
- **RIP v1/v2**
- **RIPng**
- **OSPF v2/v3**
- **RRRPv2**

Traffic Management and QoS

- **Priority IEEE 802.1p QoS**
- **Queues per port**: 8
- **Traffic Shaper**: port-based shaping
- **Scheduler**: SPQ, WRR

Management Applications

- **EMS**: MetaASSIST EMS*

Security Protocols

- **Port security**: IP and MAC-based access control
- **Authentication**: IEEE 802.1X
- **Storm Control**: Multicast/Broadcast/Flooding Storm Control

Management Protocols

User Management interfaces

- **Command line interface**: Cisco-like CLI
- **WEB-GUI**
- **SNMP**: V3, V2C, V1
- **Telnet**

Secure Access

- **HTTPS, SSH, SSL, Radius, TACACS+**

Configuration

- **TFTP, USB**

Diagnostic Syslog

- **Per VLAN mirroring**
- **Ethernet Copper connection diagnostic tool**

DHCP

- **Client, Server, Snooping, Relay Agent with option Option 82**

Time Sync

- **NTP**
- **IEEE1588v2 OC** (Software Timestamp)
- **TC** (Hardware Timestamp)

Port Trunk with LACP:

Static or Dynamic

Physical

- **Dimensions** :
Height: 5.7" / 145 mm,
Depth: 5.5" / 140 mm, **Width**: 3.6" / 91 mm
- **Weight**: 2 lbs / 0.87 kg
- **Mounting**: Din Rails, Wall mounting (Optional)

Power

- **Dual DC** (integrated): 12-48VDC

Environmental

- **Operating Temp.** -40° to +75°C
- **Storage Temp.** -40° to +85°C
- **Relative humidity**: Up to 95%, non condensing

Regulatory Compliance/Certifications

Safety

- IEC62368, UL62368

EMC

- CE EN 55032 Class A, FCC Part 15
- IEC61000-4-2, -3, -4, -5, -6, -8
- EN 50121-4

CE

- EMC and Safety

Vibration, shock & freefall

- IEC68-2-6, -27, -32

RoHS and WEEE

- RoHS (Pb free) and WEEE compliant

