

GL5020x-0804P2

8+4 Port Industrial Managed PoE++ Gigabit Ethernet Switch

The GL5020x-0804P2 Industrial Ethernet Switches from Actelis Networks® are high density hardened, fanless fiber fed switches able to support four 1G or 10G interfaces and up to 8 high speed gigabit interfaces per device with PoE capabilities.

The GL5020x-0804P2 is part of Actelis' DIN Rail family of access switching products designed for industrial, intelligent traffic network, surveillance, pipeline and utility applications. The GL5020x-0804P2 family are cost optimized, managed GE/10GE switches supporting multiple ten or one 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 GL5020x-0804P2 family offers wire-speed switching across 12 ports, featuring an extremely small factor, fanless design, and DIN rail mounting, the GL5020x-0804P2 family is ideal for deployment in almost any traffic, utility, or industrial networks.

The GL5020x-0804P2 supports 4 PoE (Power over Ethernet) ports with a maximum of 30W per port (802.3af and 802.3at) and 2 PoE++ ports with up to 90W (802.3bt).

Environmentally hardened with redundant power inputs, and featuring a robust, field-proven design, the unit is NEMA 4 extended temperature compliant and protected against over voltage and over current conditions, ensuring high reliability and trouble-free operation.

Interoperable with any standard Ethernet switch, router or hub GL5020x-0804P2 devices seamlessly integrate into any Ethernet network. The GL5020-0804P2 is equipped with four GE Small Form-Factor Pluggable (SFP) uplinks, whilst the GL5020X-0804P2 has four 10GE uplinks. Both products support 8x 10/100/1000Base-T copper RJ45 ports. The GL5020x-0804P2 allows assignment of a service/device per port.

GL5020x-0804P2 incorporates 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 GL5020x-0804P2 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 GL5020x-0804P2 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** GE or 10G switch – 12 ports
- **Industrial Design** - Harsh environments, wide temperature range compact IP30
- **Optional PoE** (Power over Ethernet) ports
- **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
- **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**



High Performance Broadband Over Fiber

GL5020x-0804P2

Specifications

Interfaces

Ethernet (Network/User) -

- **10/100/1000Base-T:** 8 ports
Connector: RJ45, Auto-MDI/MDI-X
- **PoE:**
4x 30W (802.3af or 802.3at)
2x 90W (802.3bt)

Uplinks: 4 ports

Connector: SFP/SFP+, MSA compliant
GL5020-0804P2:

- **GE SFP:** 4 ports
- **GL5020X-0804P2:**
- **10GE SFP+:** 4 ports

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: 16K
- 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 255 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
- **Port Trunk with LACP:**
Static or Dynamic

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

NTP

Physical

- **Dimensions :**
Height: 5.7" / 145 mm,
Depth: 4.6" / 118 mm, Width: 2.8" / 72 mm
- **Weight:** 2 lbs / 0.9 kg
- **Mounting:** Din Rails, Wall mounting (Optional)

Power

- Dual DC (integrated): 48-57VDC

Environmental

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

Regulatory Compliance/Certifications

Safety

- UL 60950, CSA C22.2, EN61010-1, UL 508

EMC

- FCC Part 15, CISPR 22 (EN55032) Class A
- IEC61000-4-2, -3, -4, -5, -6, -8

CE

- EMC and Safety

Vibration, shock & freefall

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

RoHS and WEEE

- RoHS (Pb free) and WEEE compliant



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