

# **Preliminary**

# **GL6030**

# 28 Port Industrial Managed PoE+ Gigabit Ethernet Switch

The GL6030 PoE+ Ethernet switches from Actelis Networks® are hardened, fiber fed switches able to support up to 24 high speed gigabit interfaces each supporting 30W of PoE.

The GL6030 product line is part of Actelis' family of switching products designed for industrial, intelligent traffic network, surveillance, pipeline and utility applications. Complementing the ML684Dx, which supports both bonded copper and fiber, and switches in the ML510D family, the GL6030 is a cost optimized, fiber-fed only unit supporting multiple one gigabit Ethernet connections that allow multiple sensors or cameras at various locations to be connected in MSTP/RSTP/STP mesh or Fast healing ring configurations.

The GL6030 offers full Ethernet switching capabilities, supporting 4 GE SFP ports for connection to the core network, and 24 GE client ports on each device. The GL6030 is ideal for deployment in indoor air-conditioned or outdoor locations.

All the 24 Ethernet client ports support PoE (Power over Ethernet) with a maximum of 30W per port (802.3af and 802.3at).

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 GL6030 devices seamlessly integrate into any Ethernet network. Equipped with 24 10/100/1000Base-T Ethernet interfaces and four 100/1000Base-FX Small Form Factor (SFP) ports, the GL6030 allows assignment of a service or a customer per port.

Actelis has comprehensive mechanisms that include high level authentication, advanced encryption capabilities, as well as

sophisticated filtering and access control using layer 2 processes.

Actelis GL6030 offers an all-embracing level of security initiating from the physical layer through switching and up to the management and access layers. This gives you a significantly strong and resilient solution and enables transmissions which have the highest level of immunity with notably lower vulnerability to hacking attempts.

The GL6030 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 GL6030 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**

- 1U 19" Rack mounted
- Drop and Continue, RSTP/STP mesh or ERPS
- PoE (Power over Ethernet) ports
- Compact Design
- Enhanced Security Low vulnerability to hacking
- Rapid Service Deployment
- Low Delay and Jitter for Voice and Video Transmission

## **Applications**

- Telemetry
- IP-based Traffic Controllers
- Smart Grid Sensors
- Dynamic Message Signs
- HD Video Cameras & Streaming
- Vehicle Detection
- Smart Parking
- Emergency Response
- Supports & Complements City Wi-Fi Access



## **GL6030**

## Specifications

#### Interfaces

## Ethernet (Network/User) -

- 10/100/1000Base-T: 24 ports Connector: RJ45, Auto-MDIX PoE: 24x 30W (802.3af or 802.3at)
- 1000Base-FX: 4ports
   Connector: SFP Based, MSA compliant multimode (mm) and single mode (sm)

## Management (out-of-band)

- Console/Craft: RS-232, Terminal emulator, Baud rate: 115200bps
   Connector: RJ45
- Storage: USB

#### **Alarm Contacts**

• Terminal Block, 1 Output, 1 input

## **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 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

## 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

#### 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: 1.7" / 44 mm,
  - **Depth:** 13.0" / 331 mm, **Width:** 17.3" / 440 mm
- Weight: 13 lbs / 6 kg
- Mounting: Rack Mounting

## **Power Options**

- Dual DC (integrated): 48-57 VDC (>50VDC for PoE), 26 Watt
- AC (integrated): 90~264VAC
- AC+DC (integrated)
- PoE budget: 348W @ AC, 720W @ DC 30W per PoE port

## **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

#### CE

EMC and Safety

### Vibration, shock & freefall

• IEC61373, IEC60068-2-32

RoHS and WEEE

RoHS (Pb free) and WEEE compliant



Corporate Headquarters
Actelis Networks, Inc.
47800 Westinghouse Drive
Fremont, CA 94539
t. +1 510-545-1045 or toll-free in U.S. 1-866-ACTELIS

Company and General Information: info@actelis.com
Asia Pacific Sales: apacsales@actelis.com
Central and Latin America Sales: calasales@actelis.com
Europe, Middle East and Africa Sales: emeasales@actelis.com
North America Sales: nasales@actelis.com

Actelis Networks® is the leading global supplier of Carrier Ethernet over Copper broadband solutions for telecom service providers, enterprises and municipalities. Deployed by more than 350 customers worldwide, Actelis is accelerating broadband services to businesses and residential subscribers through award-winning products and technologies. All content included in this document is the exclusive property of Actelis Networks, Inc., and protected by U.S. and international copyright laws. Specifications are subject to change without notice. Actelis® and Actelis Networks® are registered trademarks. EFMplus™ and MetaASSIST™ are trademarks of Actelis. Any other trademarks used herein are the property of their respective owners. Copyright ©2023 All Rights Reserved. Learn more at www.Actelis.com.