

# XIDS-609/610

# 3G ports Gigabit Advanced Managed Industrial Ethernet Switch



#### Overview

The XenOpt XIDS-609/610 series managed Industrial Ethernet switches are equipped with up to 3 Ethernet ports. The "Fi Ring" redundant Ring (recovery time < 20ms), RSTP/STP can increase system reliability and network availability. The elevated hardware reliability is especially suitable for industrial applications.

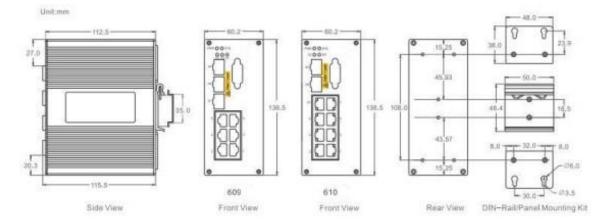
## **Features**

# **Product Highlights**

- Designed for tough environment:
  - o Dust-proof grade IP40
  - Operating temperature ranges from -40 to +75 °C
  - o Redundant power
  - o Fan-free design
- Networking features:
  - 2 Gigabit ports for redundant ring and 1
    Gigabit port for uplink
  - Comply with IEC61850-3 and IEEE 1613 standard
  - Integrated management, monitoring and alarms via web browser, CLI, Telnet /serial console, Windows utility and SNMP
  - Support STP, RSTP, and protocol "Fi Ring" (Recovery Time<20 ms)</li>
  - SNMPv3, IEEE 802.1X, HTTPS, and SSH to enhance network
- DIN Rail mount
- $\circ \text{ XIDS-609: } 6x10/100 \text{BaseTX ports+3x1000BaseX (SFP slots)}$
- o XIDS-610: 7x10/100BaseTX ports+1x10/100/1000BaseTX+2x1000BaseX (SFP slots)
- $\circ$  Command Line Interface (CLI) for quickly configuration major managed functions
- o IEEE1588 PTP V2(PrecisionTime Protocol) for precise time synchronization of networks
- o DHCP Option 82 for IP address assignment with different policies
- FMC Ring Protocol "Fi Ring" (recovery time \< 20 ms), RSTP, STP and MSTP for network redundancy
- o Port-based VLAN, IEEE 802.1Q VLAN, and GVRP to ease network planning
- ${\color{blue}\circ}\, {\color{blue}\mathsf{Support}}\, {\color{blue}\mathsf{Ethernet/IP}}\, {\color{blue}\mathsf{and}}\, {\color{blue}\mathsf{Modbus/TCP}}\, {\color{blue}\mathsf{protocols}}\, {\color{blue}\mathsf{for}}\, {\color{blue}\mathsf{device}}\, {\color{blue}\mathsf{management}}\, {\color{blue}\mathsf{and}}\, {\color{blue}\mathsf{monitoring}}\, {\color{blue}\mathsf{device}}\, {\color{blue}\mathsf{management}}\, {\color{blue}\mathsf{and}}\, {\color{blue}\mathsf{monitoring}}\, {\color{blue}\mathsf{device}}\, {\color{blue}\mathsf{management}}\, {\color{blue}\mathsf{and}}\, {\color{blue}\mathsf{monitoring}}\, {\color{blue}\mathsf{device}}\, {\color{blue}\mathsf{device}}\, {\color{blue}\mathsf{monitoring}}\, {\color{blue}\mathsf{device}}\, {\color{blue}\mathsf{monitoring}}\, {\color{blue}\mathsf{device}}\, {\color{blue}\mathsf{device}}$
- o IGMP snooping and GMRP for filtering multicast traffic
- Support port mirroring
- $\circ$  Support traffic control of multicast and broadcast
- $\circ$  QoS and ToS/DiffServ to increase determinism
- o Port Trunking for optimum bandwidth utilization
- o SNMPv3, IEEE 802.1X, HTTPS, and SSH to enhance network security
- Support TACACS+
- SNMPv1/v2c/v3 for different levels of network management
- o RMON for efficient network monitoring and proactive capability
- o Bandwidth management prevents unpredictable network status
- o Lock port function for blocking unauthorized access based on MAC address
- o Automatic alarm through e-mail, relay output
- o Works with most network management software for traffic monitoring and easy network troubleshooting



## **Specifications**



## **Standards**

- IEEE 802.3
- o IEEE 802.3u
- o IEEE 802.3ab
- IEEE 802.3z
- o IEEE 802.1D-2004 for STP
- IEEE 802.1w for Rapid STP
- IEEE 802.1s Multiple STP
- IEEE 802.1Q for VLAN Tagging
- IEEE 802.1p for Class of Service
- IEEE 802.1X for Authentication
- $\circ$  IEEE 802.3ad for Port Trunk with LACP
- o IEEE 802.3x for Flow Control

## **Protocols:**

- $\circ \, IGMPv1/v2$
- o GMRP
- o GVRP
- $\circ$  SNMPv1/v2c/v3
- o DHCP Client
- o TFTP
- o SMTP
- o RMON
- HTTP○ HTTPS
- o Telnet
- Syslog
- o DHCP Option 66/67/82
- $\circ\,\mathsf{SSH}$
- o SNMP Inform
- $\circ \, \mathsf{LLDP}$
- o IEEE 1588 PTP V2
- o Ipv6
- o SNTP Server/Client

## Flow Control:

- IEEE 802.3x flow control
- o back pressure flow control

# Management Information Base (MIB):

- o MIB-II
- o Ethernet-Like MIB
- P-BRIDGE MIB
- O Q-BRIDGE MIB
- o Bridge MIB
- o RSTP MIB
- o RMON MIB Group 1, 2, 3, 9

# **Switch Properties:**

- o Priority Queues: 4
- o Max. Number of Available VLANs: 256
- o VLAN ID Range: VID 1 to 4094
- o IGMP Groups: 256
- o MAC Table Size: 8K
- o Packet Buffer Size: 1 Mbit

## Interface:

- o Fiber Ports: 1000BaseX (SFP slots)
- RJ45 Ports: 10/ 100BaseTX or 10/ 100/ 1000BaseTX auto negotiation
- o Console Port: RS-232 (RJ45 connector)
- Alarm Contact: 2 relay outputs with current carrying capacity of 1A@24V

# **Power Requirements:**

- Input Voltage: 24 VDC (18 to 36VDC), redundant dual inputs
- o Input Current:
  - $\circ \, \text{XIDS-609:} \, 0.41 \\ \text{A@24VDC}$
- O XIDS-610: 0.5A@24VDC
- o Overload Current Protection: Present
- o Reverse Polarity Protection: Present
- o Connector: 6-contact terminal blocks

# **Mechanical Properties:**

- Housing: Metal, IP40 protection
- o Dimensions: 60.2 x 115.5 x 138.5 mm
- o Weight: 750g
- Installation: DIN-Rail mounting, wall mounting

#### **Environmental Limits:**

- Operating Temperature:
  - $\circ$  Standard Models: 0 to +60°C (32 to 140°F)
  - $\circ$  Wide Temp. Models:-40 to +75°C (-40 to 167°F)
- $\circ$  Storage Temperature: -40 to +85°C (- 40 to 185°F )
- Ambient Relative Humidity: 5 to 95% (non-condensing)

# **Standards and Certifications:**

- o Safety: UL 60950-1
- EMI: FCC Part 15 Subpart B Class A, EN 55022 Class A EMS:
  - EN 61000-4-2 (ESD) Level 3, EN 61000-4-3 (RS) Level 3, EN 61000-4-4 (EFT) Level 3, EN 61000-4-5 (Surge) Level 3, EN 61000-4-6 (CS) Level 3, EN 61000-4-8 Level 3
- Shock: IEC 60068-2-27Freefall: IEC 60068-2-32
- o Vibration: IEC 60068-2-6

# **Warranty Period:**

o 5years



# **Ordering information**

Part Number	Product Description
XIDS-609	Industrial Switch, 6x10/100BaseTX ports+3x1000BaseX (SFP slots)
XIDS-610	Industrial Switch, 7x10/100BaseTX ports+1x10/100/1000BaseTX +2x1000BaseX (SFP slots)

Note: XIDS-609/610 series support up to 3 1000BaseX (SFP slots). Please find the compatible SFP modules in the accessories list below.

# IDS 609/610 accessories - Transceivers

Part Number	Product Description
XSM311-02Lx	SFP 1.25 Gbps, 1310 nm MMF $$ 2 km, $-40^{\circ}C\sim+85^{\circ}C$
XSM851-M5Lx	SFP 1.25 Gbps, 850 nm MMF 500 m, $-40^{\circ}\text{C} \sim +85^{\circ}\text{C}$
XSS311-20Lx	SFP 1.25 Gbps, 1310 nm, 20 km, $-40^{\circ}$ C $\sim +85^{\circ}$ C
XC6-UTUTTC0	Cable, 1 GbE Cu UTP Cat 6A, length: 100 m

## **Important Notice**

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