# **3G ports Gigabit Advanced Managed Industrial Ethernet Switches**

# IDS 609/610 Advanced Level Series

- . 2 Gigabit ports for redundant ring and 1 Gigabit port for uplink
- Proprietary Protocol "Fi Ring" (recovery time < 20 ms), RSTP,</li> STP and MSTP for network redundancy
- . SNMPv3, IEEE 802.1X, HTTPS, and SSH to enhance network security
- . Easy network management through web browser, CLI, Telnet /serial console. Windows utility and SNMP
- Industrial-grade design with -40° C to+75° C operating temperature and redundant power inputs
- IP40 dust-proof standard



## Overview

The IDS 609 and the IDS 610 series Gigabit advanced managed redundant Ethernet switches are equipped with up to 3 Gigabit Ethernet ports, ideal for building a Gigabit redundant ring. The "Fi Ring" redundant ring (recovery time < 20ms), RSTP, STP and MSTP can increase system reliability and your network availability. The IDS 609 and the IDS 610 series can be applied in any industrial sector such as energy, transportation and industrial automation etc.

## Features and Benefits

IDS 609:

6x10/100BaseTX ports+3x1000BaseX(SFP slots)

7x10/100BaseTX ports+1x10/100/1000BaseTX ports + 2x1000BaseX(SFP slots)

- . Command Line Interface (CLI) for quickly configuration major managed functions
- . IEEE1588 PTP V2(PrecisionTime Protocol) for precise time synchronization of networks
- DHCP Option 82 for IP address assignment with different
- Proprietary Protocol "Fi Ring" (recovery time < 20 ms), RSTP,</li>
- . STP and MSTP for network redundancy Port-based VLAN, IEEE 802.10 VLAN, and GVRP to ease network planning
- Support Ethernet/IP and Modbus/TCP protocols for device management and monitoring

- . IGMP snooping and GMRP for filtering multicast traffic
- Support port mirroring
- · Support traffic control of multicast and broadcast
- · QoS and ToS/DiffServ to increase determinism
- Port Trunking for optimum bandwidth utilization
- . SNMPv3, IEEE 802.1X, HTTPS, and SSH to enhance network security
- Support TACACS+
- SNMPv1/v2c/v3 for different levels of network management
- . RMON for efficient network monitoring and proactive capability
- · Bandwidth management prevents unpredictable network status
- Lock port function for blocking unauthorized access based on MAC address
- · Automatic alarm through e-mail, relay output
- . Works with FirstMile FiVision NMS industrial network management software for traffic monitoring and easy network troubleshooting

## Specifications

## Standards:

IEEE 802.3

IEEE 802.3u IEEE 802.3ab

IEEE 802.3z

IEEE 802.3x for Flow Control

IEEE 802.1D-2004 for STP IEEE 802.1w for Rapid STP

IEEE 802.1s for Multiple STP

IEEE 802.10 for VLAN Tagging

IEEE 802.1p for Class of Service

IEEE 802.1X for Authentication

IEEE 802.3ad for Port Trunk with LACP

IGMPv1/v2, GMRP, GVRP, SNMPv1/v2c/v3, DHCP Client, TFTP, SMTP, RMON, HTTP, HTTPS, Telnet, Syslog, DHCP Option 66/67/82, SSH, SNMP Inform, LLDP, IEEE 1588 PTP V2, Ipv6, SNTP Server/Client

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

IEEE 802.3x flow control, back pressure flow control

## Switch Properties

Priority Oueues: 4

Max. Number of Available VLANs: 256 VLAN ID Range: VID 1 to 4094

IGMP Groups: 256 MAC Table Size: 8K Packet Buffer Size: 1Mbit

Fiber Ports: 1000BaseX(SFP slots)

RJ45 Ports: 10/100BaseTX or 10/100/1000BaseTX auto negotiation Console Port: RS-232 (RJ45 connector)

Serial Port: RS-485 (DB9 male connector)

## Specifications (cont.)

### Alarm Contact:

2 relay outputs with current carrying capacity of 1A@24VDC

### Power Requirements:

Input Voltage: 24 VDC (18 to 36 VDC), redundant dual inputs Input Current:

IDS 609: <0.41A@24VDC IDS 610: <0.5A@24VDC Overload Current Protection: Present Reverse Polarity Protection: Present Connector: 6-contact terminal blocks

### Physical Characteristics:

Housing: Metal, IP40 protection Dimensions: 60.2 x 115.5 x 138.5 mm

Weight: 750g

Installation: DIN-Rail mounting, wall mounting

### **Environmental Limits:**

Operating Temperature:

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

### Standards and Certifications:

Safety: UL 60950-1

EMI: FCC Part 15 Subpart B Class A, EN 55022 Class A

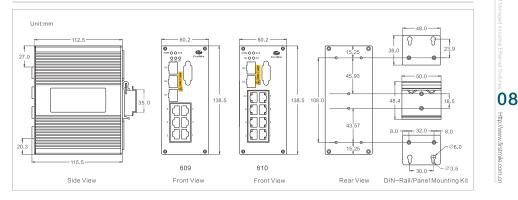
EN 61000-4-2 (ESD) Level 3, EN 61000-4-3 (RS) Level 3 EN 61000-4-4 (EFT) Level 3, EN 61000-4-5 (Surge) Level 3 EN 61000-4-6 (CS) Level 3, EN 61000-4-8 Level 3

Shock: IEC 60068-2-27 Freefall: IEC 60068-2-32 Vibration: IEC 60068-2-6

### Warranty Period: 5 years



## Dimensions



# Ordering Information

| Available Models | Temperature Range |
|------------------|-------------------|
| IDS 609          | W -40°C to +75 °C |
| IDS 610          | S 0°C to +60 °C   |

Note: The IDS 609 and the IDS 610 series support up to 3 1000BaseX(SFP slots). Please find the compatible SFP module in Appendix