

3G ports Gigabit Managed Industrial Ethernet Switches

IDS 509/510 Entry Level Series

- › 2 Gigabit ports for redundant ring and 1 Gigabit port for uplink
- › Proprietary Protocol "Fi Ring" (recovery time < 20 ms), RSTP and STP 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 to +75°C operating temperature and redundant power inputs
- › IP40 dust-proof standard



Overview

The IDS 509/510 series Gigabit managed Industrial 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 can increase system reliability and your network availability. The superb hardware reliability is especially suitable for industrial applications.

Features and Benefits

- IDS 509: 6x10/100BaseTX ports +3x1000BaseX(SFP slots)
- IDS 510: 7x10/100BaseTX ports +1x10/100/1000BaseTX ports+ 2x1000BaseX(SFP slots)
- Command Line Interface (CLI) for quickly configuration major managed functions
- FMC Ring Protocol "Fi Ring" (recovery time < 20 ms), RSTP and STP for network redundancy
- IGMP snooping for filtering multicast traffic
- Port-based VLAN, IEEE 802.1Q VLAN, and GVRP to ease network planning
- Support port mirroring
- Support traffic control of multicast and broadcast
- QoS and ToS/DiffServ to increase determinism
- Support Modbus/TCP protocols for device management and monitoring
- Port Trunking for optimum bandwidth utilization
- SNMPv3, IEEE 802.1X, HTTPS, and SSH to enhance network security
- 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 802.1Q for VLAN Tagging
 IEEE 802.1p for Class of Service
 IEEE 802.1X for Authentication
 IEEE 802.3ad for Port Trunk with LACP

Protocols:

IGMPv1/v2, GVRP, SNMPv1/v2c/v3, DHCP Client, TFTP, SMTP, RMON, HTTP, HTTPS, Telnet, Syslog, SSH, SNMP Inform, LLDP, SNT Server/Client

MIB:

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

Flow Control:

IEEE 802.3x flow control, back pressure flow control

Switch Properties

Priority Queues: 4
 Max. Number of Available VLANs: 256
 VLAN ID Range: VID 1 to 4094
 IGMP Groups: 256
 MAC Table Size: 8K
 Packet Buffer Size: 2 Mbit

Interface

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

Specifications (cont.)

Power Requirements:

Input Voltage: 24 VDC (18 to 36 VDC), redundant dual inputs
 Input Current:
 IDS 509: <math><0.41\text{A}@24\text{VDC}</math>
 IDS 510: <math><0.5\text{A}@24\text{VDC}</math>

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

Standards and Certifications:

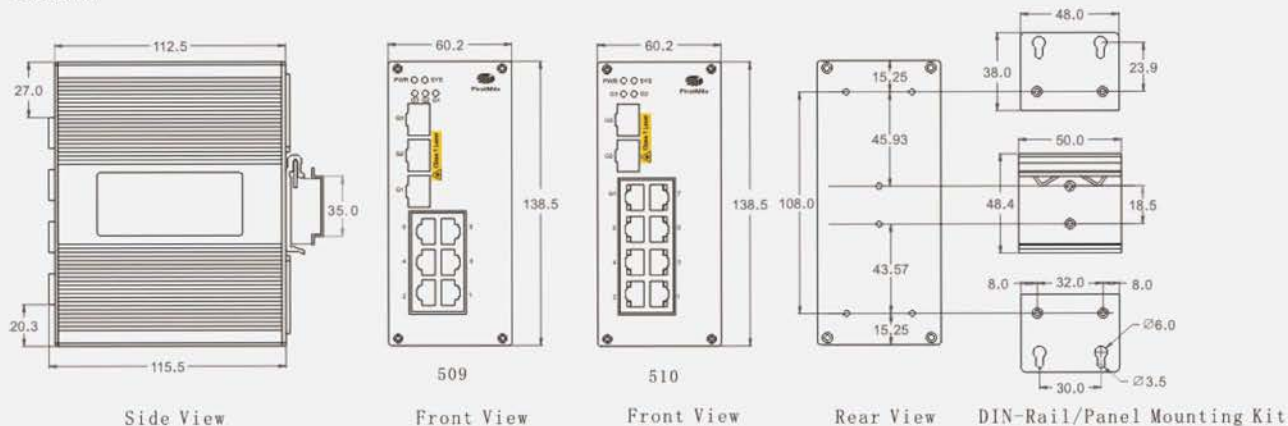
Safety: UL 60950-1
 EMI: FCC Part 15 Subpart B Class A, EN 55022 Class A
 EMS:
 EN 61000-4-2 (ESD) Level 3, EN 61000-4-3 (RS) Level 3
 EN 61000-4-4 (EFT) Level 3, EN 61000-4-5 (Surge) Level 3
 EN 61000-4-6 (CS) Level 3, EN 61000-4-8 Level 3
 Shock: IEC 60068-2-27
 Freefall: IEC 60068-2-32
 Vibration: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

Warranty Period: 5years



Dimensions

Unit: mm



Ordering Information

Available Models	Temperature Range
IDS 509	W -40°C to +75 °C
IDS 510	S 0°C to +60 °C
IDS 510-2G-4F	

Note: The IDS 509/510 series support up to 3 1000BaseX(SFP slots). Please find the compatible SFP module in Appendix