



Overview

ST-9015-FI series are designed to meet the demands of power substation automation systems (IEC 61850-3, IEEE 1613). The switches are equipped with up to 3 Gigabit Ethernet ports, ideal for building a Gigabit redundant ring. The "Fi Ring" redundant Ring (recovery time ≤ 20 ms) and RSTP/STP/MSTP can increase system reliability and of your network availability.

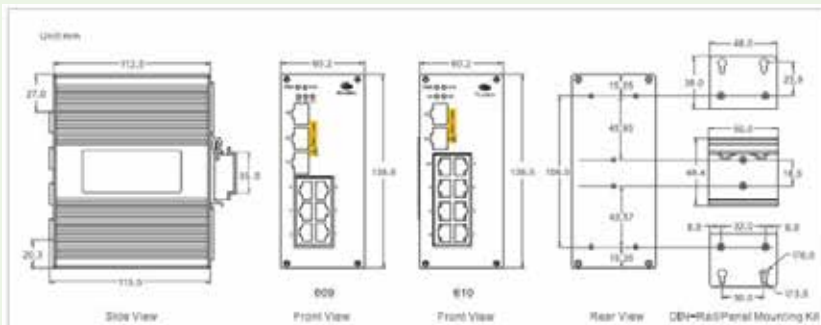
ST-9015-FI 3G ports Gigabit Advanced Managed Industrial Ethernet Switches

Fiber Industrial Switches

Features

- ST-9015-FI: 6x10/100BaseTX ports+3x1000BaseX (SFP slots)
- ST-9015-FI: 7x10/100BaseTX ports+1x10/100/1000BaseTX +2x1000BaseX (SFP slots)
- Command Line Interface (CLI) for quickly configuration major managed functions
- IEEE1588 PTP V2 (Precision Time Protocol) for precise time synchronization of networks
- DHCP Option 82 for IP address assignment with different policies
- FMC Ring Protocol "Fi Ring" (recovery time < 20 ms) and RSTP/STP for network redundancy
- IGMP snooping and GMRP for filtering multicast traffic
- Port-based VLAN, IEEE 802.1Q VLAN, and GVRP to ease network planning
- Support Ethernet/IP and Modbus/TCP protocols for device management and monitoring
- QoS and ToS/DiffServ to increase determinism
- Port Trunk for optimum bandwidth utilization
- SNMPv3, IEEE 802.1X, HTTPS, and SSH to enhance network security
- SNMPv1/v2c/v3 for different levels of network management
- Support TACACS+
- RMON for efficient network monitoring and proactive capability
- Bandwidth management prevents unpredictable network status

Dimensions



Features

- Lock port function for blocking unauthorized access based on MAC address
- Automatic alarm through e-mail, relay output
- Support port mirroring
- Support traffic control of multicast and broadcast
- Support DDM (Digital Diagnostic Monitoring)

Specifications

● Standards:

IEEE 802.3
IEEE 802.3u
IEEE 802.3ab
IEEE 802.3z
IEEE 802.1D-2004 for STP
IEEE 802.1w for Rapid STP
IEEE 802.1s Multiple STP
IEEE 802.1Q for VLAN Tagging
IEEE 802.1x for Authentication
IEEE 802.1X for Port Trunk with LACP
IEEE 802.3ad for Flow Control

● Protocols:

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:

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: 1 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@24V

● Power Requirements:

Input Voltage:
24 VDC (18 to 36VDC), redundant dual inputs
Input Current:
ST-9015-FI : <0.41A@24VDC
ST-9015-FI: <0.5A@24VDC
Overload Current Protection: Present
Reverse Polarity Protection: Present
Connector: 6-contact terminal blocks

● Mechanical Properties:

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: -40 to +85°C (-40 to 185°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 4, EN 61000-4-3 (RS) Level 3,
EN 61000-4-4 (EFT) Level4, EN 61000-4-5 (Surge) Level 4,
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

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* Specs and Pictures of the product can be revised according to R&D

* Products design in UK.

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