



## Gigabit Managed Industrial Ethernet Switches

# ST-9024/25-FI

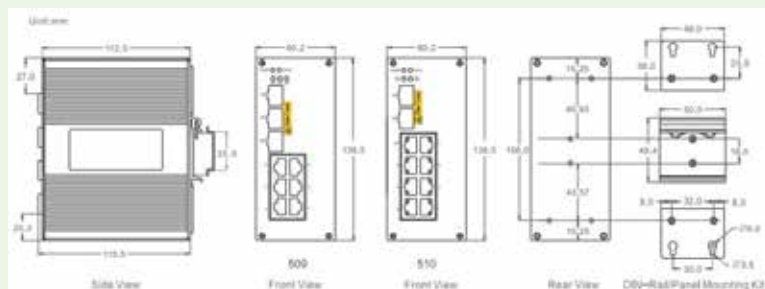
### Fiber Industrial Switches

## Overview

ST-9024/25- FI 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.

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

## Dimensions



## Features

- ST-9024/25- FI: 6x10/100BaseTX ports + 3x1000BaseX(SFP slots)
- ST-9024/25- FI : 7x10/100BaseTX ports + 1x10/100/1000BaseTX
- Command Line Interface (CLI) for quickly configuration major managed functions
- FMC Ring Protocol "Fi Ring" (recovery time < 20 ms), RSTP
- IGMP snooping for filtering multicast traffic
- Port-based VLAN, IEEE 802.1Q VLAN, and GVRP to easenetwork 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 enhancenetwork 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 onMAC address
- Automatic alarm through e-mail, relay output

## Specifications

### ● Standards:

IEEE 802.3  
IEEE 802.3u  
IEEE 802.3ab  
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  
IEEE 802.3x for Flow Control

### ● Protocols:

IGMPv1/v2, GVRP, SNMPv1/v2c/v3, DHCP Client, TFTP, SMTP, RMON, HTTP, HTTPS, Telnet, Syslog, SSH, SNMP Inform, LLDP, 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)  
100BaseFX ports  
RJ45 Ports: 10/100BaseTX auto negotiation  
Console Port: RS-232(RJ45 connector)  
Alarm Contact: 2 relay outputs with current carrying capacity of 1A@24V

### ● Power Requirements:

Input Voltage:  
IDS 509/510: 24 VDC (18 to 36VDC), redundant dual inputs  
IDS 510-2G-4F: 24VDC (12 ~ 36VDC), redundant dual inputs  
Input Current:  
IDS 509 : <0.41A@24VDC  
IDS 510 : <0.5A@24VDC  
IDS 510-2G-4F: <0.4A@24VDC  
Overload Current Protection: Present  
Reverse Polarity Protection: Present  
Connector: 6-contact terminal block

### ● 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:  
Standard Models: 0 to +60°C (32 ~ 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