

# EKI-5525S/ M Series

4-port +1x100FX port (Single/Multi-mode, SC/ST type), Fast Ethernet ProView Switch



## Features

- Communicates with SCADA software via Modbus/TCP
- Communicates with NMS (Networking management system) via SNMP
- Port-based QoS for deterministic data transmission
- 40~75°C operating temperature range (EKI-5525S/ SI-ST, EKI-5525M/ MI-ST only)
- 12~48 V<sub>DC</sub> ( 8.4 ~52.8 VDC ) wide-range power input
- EMV Level 3 protection for extreme outdoor environments
- IEEE 802.3az Energy Efficient Ethernet (EEE)
- Jumbo Frame Support (Up to 9,216 Bytes)
- Supports redundant 12~48V<sub>DC</sub> power input and P-Fail relay
- Loop detection



## Introduction

The EKI-5525S/SI/S-ST/SI-ST and EKI-5525M/MI/M-ST/MI-ST are the world's first convergence switches for process control and IT networking management. This series uses Modbus/TCP to communicate with the SCADA software and SNMP to communicate with NMS (Networking Management System) at the same time, thereby allowing full read control over the devices either for control engineers or for IT. The devices come with the Port based QoS for deterministic data transmission allows the priority ports to prioritize the traffic coming over those ports and delay the less immediately necessary data over the remaining ports. EKI-5525S/SI/S-ST/SI-ST and EKI-5525M/MI/M-ST/MI-ST switches use the highest quality components, to enable the range to operate in temperatures of between -40 and 75°C along with EMV Level 3 protection to repel electromagnetic interface for industrial resistance.

## Specifications

### Communications

Standard	IEEE 802.3, 802.3u, 802.3x, 802.1p, 802.3az
LAN	10/100Base-T(X), 100Base-FX
Transmission Distance	Ethernet: Up to 100 m Multi-mode Fiber: Up to 2 km (EKI-5525M Series) Single-mode Fiber: Up to 30 km (EKI-5525S Series)

### Optical Fiber

Multi-Mode (EKI-5525M/MI/M-ST/MI-ST)	Wavelength: 1310nm Tx Power: -14/-20 dBm Rx Sensitivity: -32 dBm Parameters: 50/125 um, 62.5/125 um
Single-Mode (EKI-5525S/SI/S-ST/SI-ST)	Wavelength: 1310 nm Tx Power: -8/-15 dBm Rx Sensitivity: -34 dBm Parameters: 9/125 um

### Transmission Speed

Up to 100 Mbps

### Interface

Connectors	4 x RJ45 ports 1 x SC/ST type fiber optic connectors 6-pin screw Terminal Block (including relay)
LED Indicators	P1, P2, P-Fail, Loop detection 10/100T(X): Link/Activity, Speed

### Switch Properties

MAC Table Size	2K
Packet Buffer Size	1M bit
Switching Capacity	1 Gbps
Jumbo Frame	9216 bytes

### Power

Power Consumption	Max. 2.8 W
Power Input	12~48 VDC (8.4~52.8 VDC), redundant dual inputs
Fault Output	1 Relay Output

### Mechanism

Dimensions (W x H x D)	27 x 120 x 84 mm
Enclosure	IP30, metal shell with solid mounting kits
Mounting	DIN-Rail, Wall

### Protection

Reverse Polarity	Present
Overload Current	Present

### Environment

Operating Temperature	EKI-5525S/S-ST/M/MI-ST: -10~60°C (14~140°F) EKI-5525S/SI-ST/MI-ST: -40~75°C (-40~167°F)
Storage Temperature	-40 ~ 75°C (-40 ~ 167°F)
Operating Humidity	10 ~ 95% (non-condensing)
Storage Humidity	10 ~ 95% (non-condensing)
MTBF	282,703 hours

### Certification

Safety	IEC/EN 60950-1, UL508, Class 1 Division 2, ATEX, IECEx
EMC	CE, FCC
EMI	EN 55011/55022 Class A, EN 61000-6-4, FCC Part 15 Subpart B 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
Shock	EN 61000-4-8 (Magnetic Field) Level 3
	IEC 60068-2-27
	IEC 60068-2-32
	IEC 60068-2-6
Freefall	
Vibration	

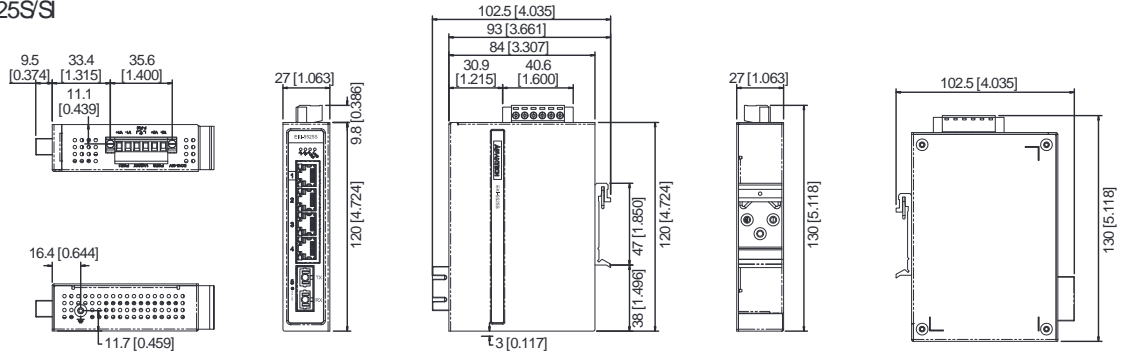
## Ordering Information

EKI-5525S	4-port +1 x100FX port (Single-mode, SC type), Fast Ethernet ProView Switch
EKI-5525SI	4-port + 1 x100FX port (Single-mode, SC type), Fast Ethernet ProView Switch with Wide Temperature
EKI-5525M	4-port + 1 x100FX port (Multi-mode, SC type), Fast Ethernet ProView Switch
EKI-5525MI	4-port + 1 x100FX port (Multi-mode, SC type), Fast Ethernet ProView Switch with Wide Temperature
EKI-5525S-ST	4-port + 1 x100FX port (Single-mode, ST type), Fast Ethernet ProView Switch
EKI-5525SI-ST	4-port + 1 x100FX port (Single-mode, ST type), Fast Ethernet ProView Switch with Wide Temperature
EKI-5525M-ST	4-port + 1 x100FX port (Multi-mode, ST type), Fast Ethernet ProView Switch
EKI-5525MI-ST	4-port + 1 x100FX port (Multi-mode, ST type), Fast Ethernet ProView Switch with Wide Temperature

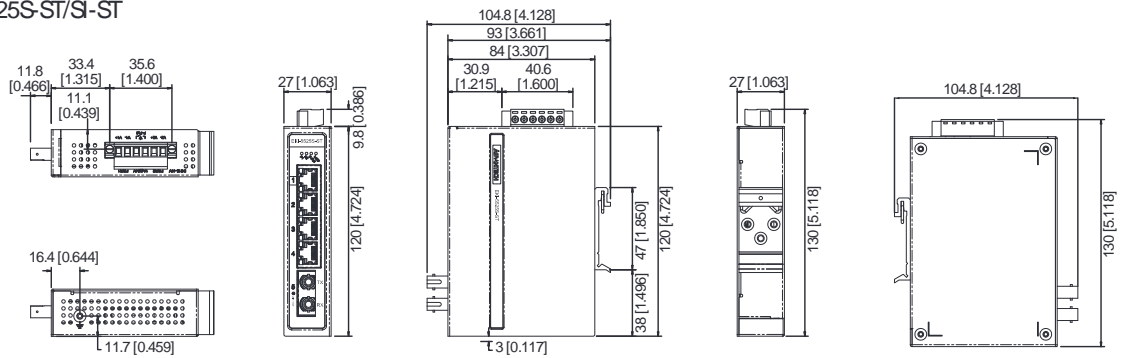
# Dimensions

Unit: mm [inch]

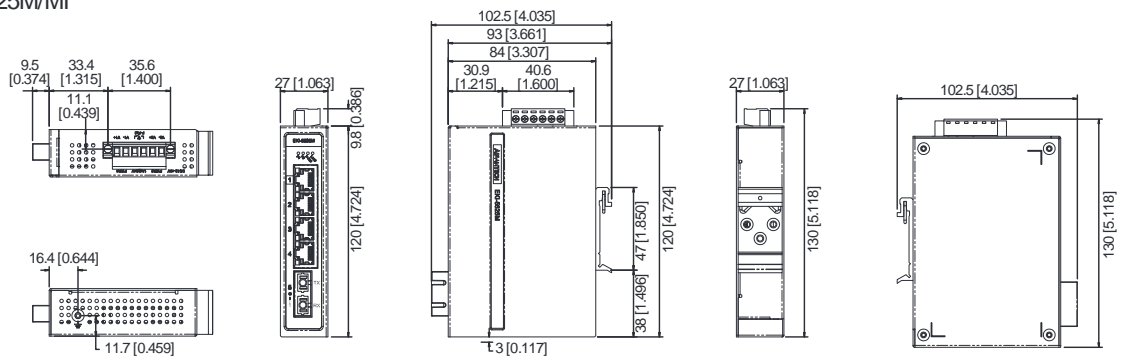
## EKI-5525S/S



## EKI-5525S-ST/SI-ST



## EKI-5525M/MI



## EKI-5525M-ST/MI-ST

