EKI-5726F/FI

16-port+2 SFP Gigabit 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-5726FI only)
- 12 ~ 48 V_{DC} (8.4 ~ 52.8 V_{DC}) wide-range power input
- EMS 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 ~ 48 V_{DC} power input and P-Fail relay
- Loop detection

Introduction

The EKI-5726F/FI 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 the 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-5726F/FI switches use the highest quality components, to enable the range to operate in temperatures of between -40 and 75°C along with EMS Level 3 protection to repel electromagnetic interface for industrial resistance.

Specifications

Communications

- **Standard** — IEEE 802.3, 802.3u, 802.3x, 802.1p, 802.3az, 802.3ab
- **LAN** — 10/100/1000Base-T(X), Optional 100Base-FX, 1000Base-SX/LX/LHX/XD/ZX/EZX
- **Transmission Distance** — Ethernet: UP to 100 m (4-wire Cat.5e, Cat.6 RJ-45 cable suggested for Gigabit port)
SFP: UP to 110 km (depends on SFP)
- **Transmission Speed** — Ethernet: 10/100/1000 Mbps Auto-Negotiation
Gigabit Copper: 10/100/1000 Mbps, Auto-Negotiation
Gigabit Fiber: UP to 1000 Mbps

Interface

- **Connectors** — 16 x RJ45
2 x SFP ports
6-pin removable screw terminal (power & relay)
- **LED Indicators** — P1, P2, P-Fail, Loop detection
10/100/1000T(X): Link/Activity, Speed
SFP: Link/Activity

Switch Properties

- **MAC Table Size** — 8K
- **Packet Buffer Size** — 4.1M bit
- **Switching Capacity** — 36 Gbps
- **Jumbo Frame** — 9216 bytes

Power

- **Power Consumption** — Max. 9.6W
- **Power Input** — 12~48 V_{DC} (8.4~52.8 V_{DC}), redundant dual inputs
- **Fault Output** — 1 Relay Output

Mechanism

- **Dimensions (W x H x D)** — 74 x 120 x 84 mm
- **Enclosure** — IP30, metal shell with solid mounting kits
- **Mounting** — DIN-Rail, Wall

Protection

- **Reverse Polarity** — Present
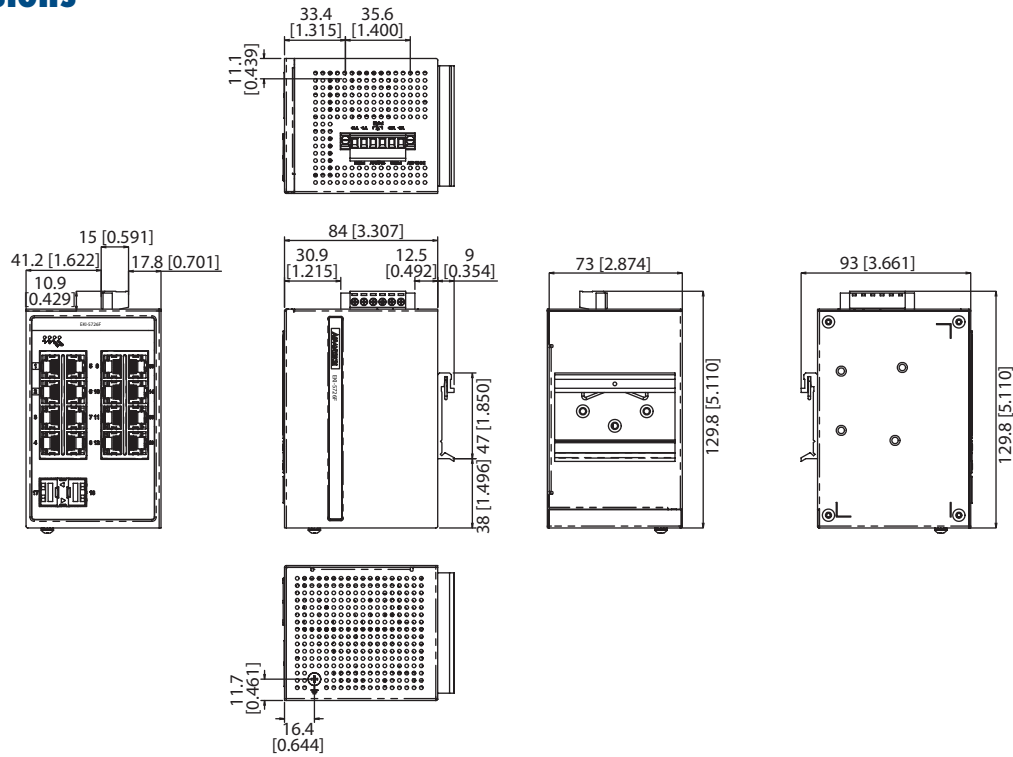- **Overload Current** — Present

Environment

- **Operating Temperature** — EKI-5726F: -10~60°C (14~140°F)
EKI-5726FI: -40~75°C (-40~167°F)
- **Storage Temperature** — -40 ~ 85°C (-40 ~ 185°F)
- **Operating Humidity** — 10 ~ 95% (non-condensing)
- **Storage Humidity** — 10 ~ 95% (non-condensing)
- **MTBF** — 1,962,789 hours

Certification

- **Safety** — IEC/EN60950, UL60950, UL508, Class 1 Division 2, ATEX
- **EMI** — FCC Part 15 Subpart B Class A, EN 55011/55022 Class A
- **EMS** — EN 61000-4-2 (Level 3)
EN 61000-4-3 (Level 3)
EN 61000-4-4 (Level 3)
EN 61000-4-5 (Level 3)
EN 61000-4-6 (Level 3)
EN 61000-4-8 (Level 3)
- **Shock** — IEC 60068-2-27
- **Freefall** — IEC 60068-2-32
- **Vibration** — IEC 60068-2-6

Dimensions

Unit: mm [inch]

Ordering Information

- **EKI-5726F**   16-port+2 SFP Gigabit Ethernet ProView Switch
- **EKI-5726FI**   16-port+2 SFP Gigabit Ethernet ProView Switch with Wide Operating Temperature Range