EKI-5725/I
5-Port Gigabit Ethernet ProView Switch

EKI-5728/I
8-Port Gigabit Ethernet ProView Switch

Features

- Communicates with SCADA software via Modbus/TCP
- Communicates with NMS via SNMP
- Port-based QoS for deterministic data transmission
- Wide operating temperature range of -40 ~ 75°C (EKI-5725I and EKI-5728I only)
- Wide power input range of 12 ~ 48V$_{DC}$ (8.4 ~ 52.8V$_{DC}$)
- EMS Level 3 protection for extreme outdoor environments
- IEEE 802.3az Energy-Efficient Ethernet
- 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-5725/I and EKI-5728/I are the world's first convergence switches for process control and IT networking management. This series use Modbus/TCP to communicate with SCADA software and SNMP to communicate with NMS simultaneously, thereby enabling full read control over devices for control engineers or for IT personel. The devices come with the port-based QoS for deterministic data transmission, which allows specific ports to prioritize traffic while delaying less important data via the remaining ports. The EKI-5725/I and EKI-5728/I switches use the highest quality components and can operate in temperatures of -40 ~ 75°C along with EMS Level 3 protection to protect against electromagnetic interference.

Specifications

Communications

- **Standard**: IEEE 802.3, 802.3u, 802.3x, 802.1p, 802.3az, 802.3ab
- **LAN**: 10/100/1000BASE-TX
- **Transmission Distance**: Up to 100 m
- **Transmission Speed**: Up to 1000 Mbps

Interface

- **Connectors**: EKI-5725/I: 5 x RJ45
  EKI-5728/I: 8 x RJ45
  6-pin removable screw terminal (power & relay)
- **LED Indicators**: P1, P2, P-Fail, Loop detection
  10/100/1000T(X): Link/Activity, Speed

Switch Properties

- **MAC Table Size**: EKI-5725/I: 2K
  EKI-5728/I: 8K
- **Packet Buffer Size**: EKI-5725/I: 1M bit
  EKI-5728/I: 4.1M bit
- **Switching Capacity**: EKI-5725/I: 10 Gbps
  EKI-5728/I: 16 Gbps
- **Jumbo Frame**: 9216 bytes

Power

- **Power Consumption**: EKI-5725/I: Max. 2 W
  EKI-5728/I: Max.5.2 W
- **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)**: EKI-5725/I: 27 x 120 x 84 mm
  EKI-5728/I: 43 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-5725 & EKI-5728: -10 ~ 60°C (14 ~ 140°F)
  EKI-5725I & EKI-5728I: -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**: EKI-5725/I: 5,168,110 hours
  EKI-5728/I: 4,176,861 hours

Certification

- **Safety**: IEC/EN 60950-1, UL508, Class 1 Division 2, IECEx, ATEX, e-Mark(EKI-5728/I)
- **EMC**: CE, FCC, e-Mark(EKI-5728/5728I only)
- **EMI**: EN 55011/55022 Class A, EN 61000-6-4, FCC Part 15 Subpart B 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
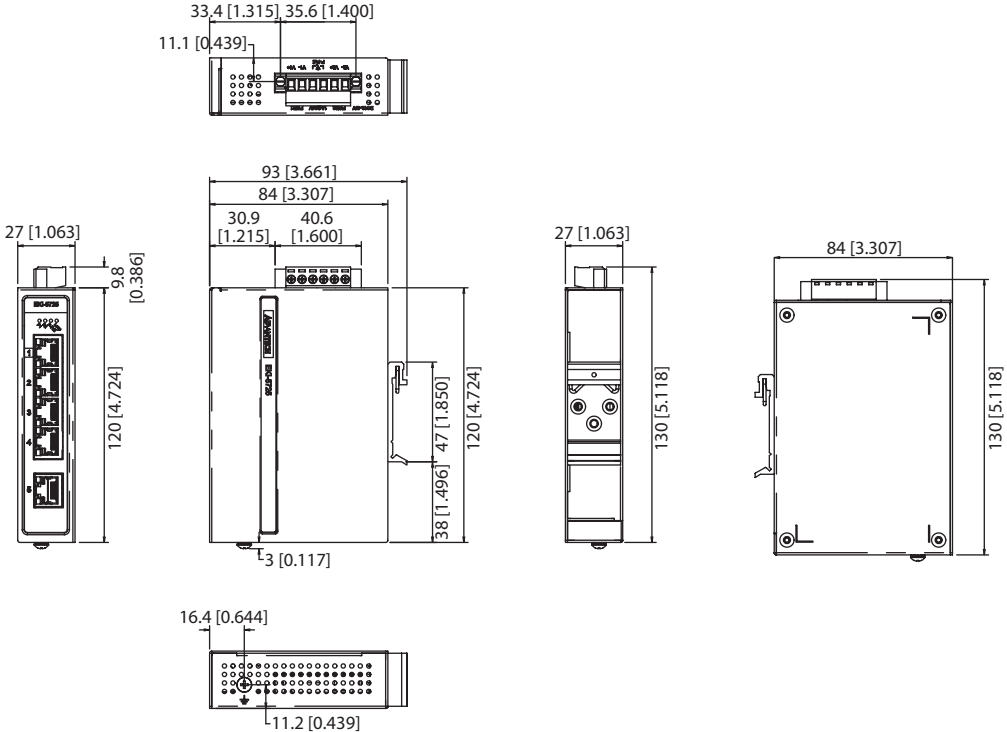- **Freefall**: IEC 60068-2-32
- **Vibration**: IEC 60068-2-6

Ordering Information

- **EKI-5725**: 5-port Gigabit Ethernet ProView Switch
- **EKI-5725I**: 5-port Gigabit Ethernet ProView Switch with Wide Temperature
- **EKI-5728**: 8-port Gigabit Ethernet ProView Switch
- **EKI-5728I**: 8-port Gigabit Ethernet ProView Switch with Wide Temperature

Last updated: 21-Aug-2020

Dimensions

Unit: mm [inch]

EKI-5725/I

33.4 [1.315] 35.6 [1.400]
11.1 [0.439]

93 [3.661]
84 [3.307]
30.9 [1.215] 40.6 [1.600]

27 [1.063]
9.8 [0.386]
120 [4.724]

27 [1.063]
130 [5.118]

84 [3.307]
130 [5.118]

47 [1.850]
38 [1.496]
120 [4.724]
3 [0.117]

16.4 [0.644]
11.2 [0.439]

EKI-5728/I

33.4 [1.315]
18 [0.709]
35.6 [1.400]
11.1 [0.439]
Ø2

15 [0.591] 43 [1.693]
20.4 [0.803]
120 [4.724]

93 [3.661]
84 [3.307]
30.9 [1.215] 40.6 [1.600]
9 [0.354]
35 [1.378]
47 [1.850]
38 [1.496]
120 [4.724]

43 [1.693]
130 [5.118]

84 [3.307]
129.8 [5.110]

16.4 [0.644]
11.7 [0.461]