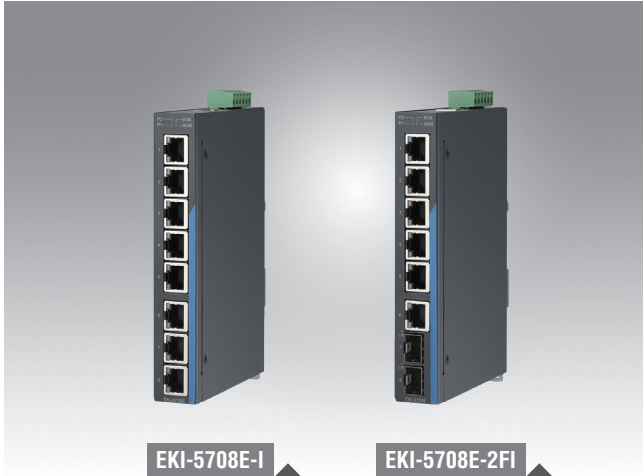# EKI-5708E

8 FE Port Managed Industrial Ethernet Switch

6FE + 2 x SFP Port Managed Industrial Ethernet Switch

EKI-5708E-I   EKI-5708E-2FI

Features

- Redundancy: X-Ring Pro (ultra-high-speed recovery time, <20 ms), RSTP/STP (802.1w/1D)
- IXM function for fast deployment
- Security Pack with 802.1X, ACL, RADI US, TACACS+, MAB Authentication, SNMPv3, HTTPS, SSH, and SFTP
- Management: SNMP v1/v2c/v3, WEB, Telnet, standard MIB, private MIB
- Supports NMS for easy and visualized to monitor and manage network remotely
- Compact size and easy installation
- Dual 12 ~ 48 V_{DC} power input and 1 x relay output

Introduction

The brand new EKI-5700 standalone managed series provide users with abundant port options for connecting to various device types, with up to 8 fast Ethernet ports and 2 SFP (mini-GBIC) ports. Slim type for easy installation and management, provides reliability and availability for your industrial network environment. These switches are embedded with Advantech's IXM function, which can benefit users with fast deployment while offering considerable savings on engineering time and costs. The series also support NMS to help IT managers with networking maintenance and failure prevention. Finally, these switches are equipped with X-Ring Pro, which can achieve ultra-high-speed recovery times of <20 ms, thus ensuring network stability. The EKI-5700 features a wide operating temperature range of -40 ~ 75°C can fit in harsh environment.

Specifications

Interfaces / Communications

- **I/O Port**
  EKI-5708E-I:
  - 8 x 10/100BASE T/TX RJ45
  EKI-5708E-2FI:
  - 6 x 10/100BASE T/TX RJ45
  - 2 x SFP (mini-GBIC) port
  Auto-Negotiation, Full/Half Duplex Mode
  Auto MDI/MDI-X Connection
- **Standards**
  IEEE 802.3 for 10BaseT
  IEEE 802.3u for 100BaseT(X)/FX
  IEEE 802.3x for Flow Control
  IEEE 802.1D for STP
  IEEE 802.1w for RSTP
  IEEE 802.1Q for VLAN Tagging
  IEEE 802.1p for CoS
- **Console port** RS-232 (RJ45)
- **Power Connector** 6-pin Terminal Block (including relay)

Physical

- **Enclosure** Metal Shell
- **Protection Class** IP 30
- **Installation** DIN-Rail, Wall-mount
- **Dimensions (W x H x D)** 25 x 152 x 105mm (0.98 x 5.98 x 4.13 inch)
- **Weight** 520 g

LED Indicators

- **System LED** P1, P2, R.M, ALM
- **Port LED** RJ-45: Link / Speed / Activity
  SFP: LNK / ACT

Environment

- **Operating Temperature** -40 ~ 75°C (-40 ~ 167°F)
- **Storage Temperature** -40 ~ 85°C (-40 ~ 185°F)
- **Ambient Relative Humidity** 5 ~ 95% (non-condensing)
- **Overload Current Protection** Present
- **Reverse Polarity Protection** Present
- **MTBF** TBC

Power

- **Power Consumption** 6W @ 24V_{DC} (System)
- **Power Input** 12 ~ 48 V_{DC}, redundant dual power input
- **Fault Output** 1 Relay Output

Certification (Preliminary)

- **Safety** EN62368-1
- **EMI** CE, CISPR 32, FCC Part 15B Class A
- **EMS** EN 61000-4-2
  EN 61000-4-3
  EN 61000-4-4
  EN 61000-4-5
  EN 61000-4-6
  EN 61000-4-8
- **EMC** EN 61000-6-2
  EN 61000-6-4
- **Shock** IEC 60068-2-27
- **Freefall** IEC 60068-2-32
- **Vibration** IEC 60068-2-6

Dimensions

Unit: mm [inch]

25.00 [0.98]

105.00 [4.13]

152.00 [5.98]

152.00 [5.98]

159.70 [6.29]
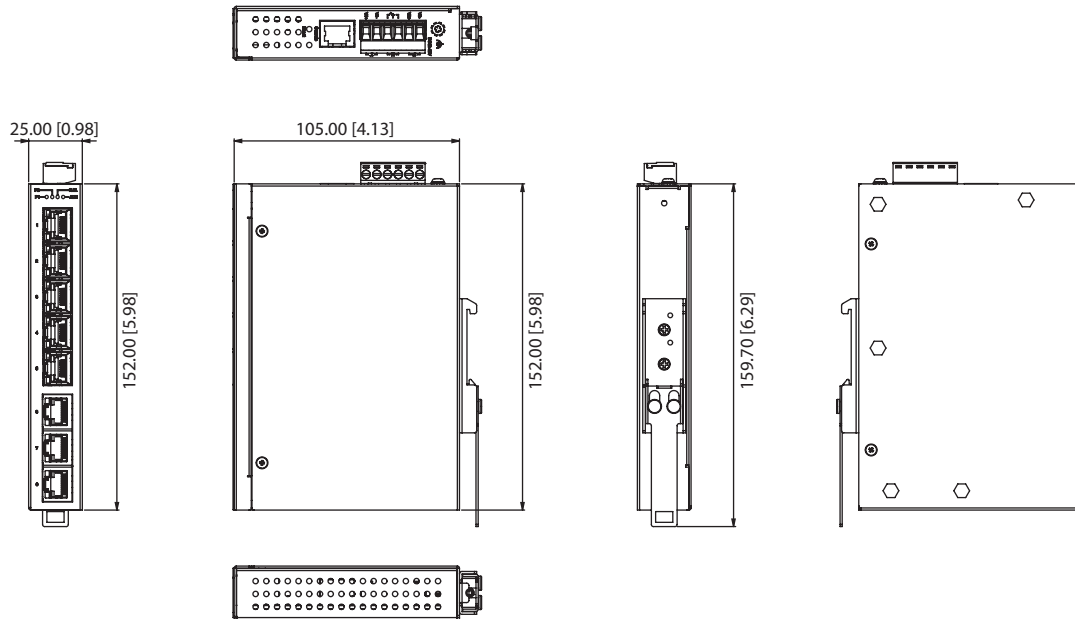
Panel Cut-out Dimensions (W x H x D): 25 x 152 x 105 mm (0.98 x 5.98 x 4.13 inch)

Switch Properties

- **Switch Capacity**   5.2Gbps
- **Transmission Rate**   3.87Mpps
- **MAC Table Size**   8K
- **Packet Buffer Size**   4.1Mb
- **Max. IGMP Group**   256
- **Max. VLAN Group**   256 (VLAN ID 1 ~ 4094)

L2 Features

- **VLAN Arrange**   802.1Q Tag-based VLAN, 802.1ad QinQ VLAN Stacking
- **Port Mirroring**   1 to 1, N to 1
                  Max. Mirror Session: 4
- **RSPAN**   Remote Switched Port Analysis
- **GARP**   GVRP, GMRP
- **IP Multicast**   IGMP Snooping v1/v2/v3, MLD
                  Snooping, IGMP Immediate leave
- **Storm Control**   Broadcast, Multicast, Unknown unicast
- **LLDP**   802.1ab LLDP, LLDP-MED
- **Industrial Protocol**   Modbus/TCP
- **Redundancy**   IEEE 802.1D-STP, IEEE 802.1s-MSTP, IEEE
                  802.1w-RSTP, X-Ring Pro, with ultra high-speed
                  recovery time less than 20ms, ERPS(G.8032)

QoS

- **Priority Queue**   WRR (Weighted Round Robin), SP (Strict Scheduling
  Scheduling   Priority) Hybrid Priority, Max. Priority Queues: 4
- **Class of Service**   IEEE 802.1p Based CoS, IP TOS, DSCP based CoS
- **Rate Limiting**   Ingress Rate limit, Egress Rate limit
- **Link Aggregation**   IEEE 802.3ad Dynamic Port Trunking, Static Port
                  Trunking

Note: For SFP copper module, EKI-5708 only supports its highest transmit rate

Security

- **Port Security**   Static/Dynamic MAC, Max. Learning Limit, MAC
                  Violation Notice
- **802.1X**   Port-based/MAC-based Authentication
                  (MD5/PEAP/TLS/TTLS Encryption)
- **MAB**   MAC Authentication Bypass
- **Authentication**   RADIUS, TACAS+
- **IP Security**   DHCP Snooping, ARP Spoofing Prevention
- **ACL**   Access Control List (IP-ACL, MAC-ACL)
                  Max. ACL Entries: 64

Management

- **DHCP**   Client, Server, Option66/67/82, DHCP Relay
- **Access**   SNMP v1/v2c/v3, WEB, Telnet, RMON, Standard
                  MIB-II, Private MIB, Ethernet-Like MIB, RMON MIB
                  (Group 1, 2, 3, 9)
- **Security access**   SSH2.0, SSL
- **Software upgrade**   TFTP, HTTP, Dual Image
- **NTP**   SNTP client

Ordering Information

- **EKI-5708E-I-A**   8FE Port Managed Ethernet Switch w/Wide Temp.
- **EKI-5708E-2FI-A**   6FE + 2 x SFP Port Managed Ethernet Switch w/Wide
                  Temp.

** This document is preliminary version and has not finalized, might be changed without notification.