EKI-7706E-2F
EKI-7706E-2FI

4FE+2SFP Fast Ethernet Managed Redundant Industrial Switch

Features

- 4 fast Ethernet ports + 2 SFP ports
- SFP socket for easy and flexible fiber expansion
- Redundancy: X-Ring Pro (ultra-high-speed recovery time, <20 ms), RSTP/STP (802.1w/1D)
- IXM function enables fast deployment
- Security: 802.1x (port-based, MD5/TLS/TTLS/PEAP encryption), RADIUS
- Management: SNMP v1/v2c/v3, WEB, Telnet, standard MIB, private MIB
- Wide operating temperature range of -40 ~ 85 °C (EKI-7706E-2FI)
- Dual 12~48 V_{DC} power input and 1 x relay output
- Support Security Pack to against internal and external cyber threats

Introduction

The EKI-7706E-2F and EKI-7706E-2FI support 4 fast Ethernet ports and 2 SFP ports. They provide abundant port options for connecting to various device types and are embedded with Advantech's IXM function, which benefits users with fast deployment and considerable savings on engineering time and costs. The EKI-7706E series also support NMS to help IT managers with networking maintenance and failure prevention. Finally, the series is equipped with X-Ring Pro, which can achieve ultra-high-speed recovery times of <20 ms, thus ensuring network stability.

Specifications

Interface

I/O Port	4 x 10/100BASE-T/TX RJ-45
	2 x SFP (mini-GBIC) port
Console port	RS-232 (RJ45)
Power Connector	6-pin screw terminal block (including relay)

Physical

Enclosure	Metal Shell
Protection Class	IP 30
Installation	DIN-Rail
Dimensions (W x H x D)	43 x 120 x 84 mm (1.69" x 4.72" x 3.31")

LED Display

System LED	PWR1, PWR2, SYS, Alarm and R.M.
Port LED	Link / Speed / Activity

Environment

Operating Temperature	-40 ~ 85 °C (-40 ~ 185 °F) EKI-7706E-2FI
	-10 ~ 60 °C (14 ~ 140 °F) EKI-7706E-2F
Storage Temperature	-40 ~ 85 °C (-40 ~ 185 °F)
Ambient Relative Humidity	10 ~ 95% (non-condensing)
Humidity	10 ~ 95% (non-condensing)

Power

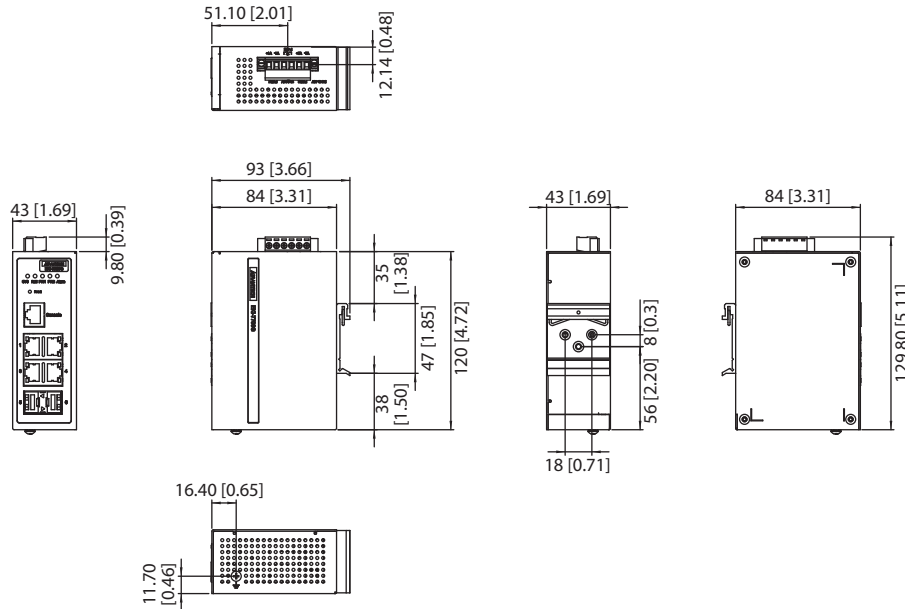|	
Power Consumption	5.28W @ 48V_{DC} (System)
Power Input	12~48 V_{DC}, redundant dual power input
Fault Output	1 Relay Output

Certification

EMI	CE, FCC Class A
Safety	UL 61010, EN LVD 62368-1
EMC	EN 61000-4-2
	EN 61000-4-3
	EN 61000-4-4
	EN 61000-4-5
	EN 61000-4-6
	EN 61000-4-8
Shock	IEC 60068-2-27
Freefall	IEC 60068-2-32
Vibration	IEC 60068-2-6
Railway Trackside	EN 50121-4

L2 Features

L2 MAC Address	8K
Packet Buffer	4.1 Mbit
VLAN Group	256 (VLAN ID 1~4094)
VLAN Arrange	Tag-based VLAN, Q-in-Q (VLAN Stacking), GVRP
Port Mirroring	Per port, multi-source port
IP Multicast	IGMP snooping v1/v2/v3, MLD Snooping, IGMP immediate leave
Storm Control	Broadcast, multicast, unknown unicast
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

Dimensions

Unit: mm [inch]

51.10 [2.01]

12.14 [0.48]

93 [3.66]

84 [3.31]

43 [1.69]

9.80 [0.39]

35 [1.38]

47 [1.85]

120 [4.72]

38 [1.50]

43 [1.69]

8 [0.3]

56 [2.20]

18 [0.71]

84 [3.31]

129.80 [5.11]

16.40 [0.65]

11.70 [0.46]

Panel Cut-out Dimensions: 84 (3.31) x 120 (4.72) x 43 (1.69)

QoS

- **Priority Queue**   WRR (Weighted Round Robin), SP (Strict Scheduling Priority) hybrid priority
- **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

Security

- **Port Security**   Static, Dynamic IP Source Guard, ARP Spoofing Prevention, Access Control List, DHCP Snooping
- **Authentication**   802.1x (Port-Based, MD5/TLS/TTLS/PEAP Encryption), TACACS+

Management

- **DHCP**   Client, server, option 66/67/82
- **Access**   SNMP v1/v2c/v3, WEB, Telnet, RMON, standard MIB, private MIB
- **Security access**   SSH2.0, SSL
- **Software upgrade**   TFTP, HTTP, dual image
- **NTP**   SNTP client

Ordering Information

- **EKI-7706E-2FI-AE**   4FE + 2SFP Port Managed Ethernet Switch w/ Wide Temp
- **EKI-7706E-2F-AE**   4FE + 2SFP Port Managed Ethernet Switch