

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

4FE+2G SFP Port Managed **Redundant Industrial Switch**



Features

- 4 x Fast Ethernet ports + 2 x SFP ports
- 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, RADIUS, 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
- Dual 12 ~ 48 V_{DC} power input and 1 x relay output









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

Interfaces / Communications

 I/O Port 4 x 10/100BASE-T/TX RJ-45 2 x SFP (mini-GBIC) port

Auto-Negotiation, Full/Half Duplex Mode

Auto MDI/MDI-X Connection IEEE 802.3 for 10BaseT

> IEEE 802.3u for 100BaseT(X)/FX IEEE 802.3z for 1000BaseSX/LX/LHX/ZX

IEEE 802.3x for Flow Control

 Console port RS-232 (RJ45)

Power Connector 6-pin screw Terminal Block (including relay)

Physical

Standards

 Enclosure Metal Shell Protection Class IP 30

Installation DIN-Rail, Wall-mount

Dimensions (W x H x D) 43 x 120 x 84 mm (1.69" x 4.72" x 3.31")

LED Indicators

System LED PWR1, PWR2, SYS, Alarm and R.M.

Port LED Link / Speed / Activity

Environment

-40 ~ 75°C (-40 ~ 167°F) (EKI-7706E-2FI) - Operating Temperature $-10 \sim 60^{\circ}\text{C} (-40 \sim 140^{\circ}\text{F}) (EKI-7706E-2F)$

 Storage Temperature -40 ~ 85°C (-40 ~ 185°F) Ambient Relative Humidity 5 ~ 95% (non-condensing)

 Overload Current Protection Present Reverse Polarity Protection Present

MTBF 2,113,340 hours

Power

 Power Consumption 5.28W @ 48V_{DC} (System)

 Power Input 12 ~ 48 V_{DC}, redundant dual power input

 Fault Output 1 Relay Output

Certification

Safety UL 61010-2-201, EN LVD 62368 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

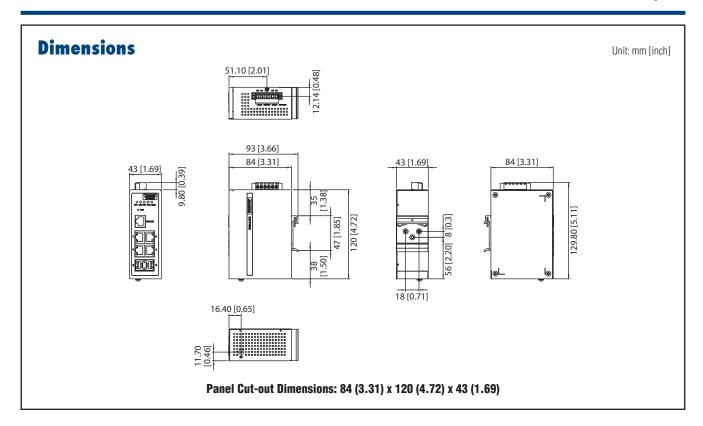
Shock IEC 60068-2-27 Freefall IEC 60068-2-32 Vibration IEC 60068-2-6

 Traffic control NEMA TS-2 Railway Trackside EN 50121-4

Switch Properties

 Switching Capacity 4.8Gbps Transmission Rate 3.57Mpps MAC Table Size Jumbo Frame 1,0240 Bytes Packet Buffer Size 4.1Mb Max. IGMP Group 256

 Max. VLAN Group 256 (VLAN ID 1 ~ 4094)



L2 Features

VLAN Arrange
 Port Mirroring
 802.1Q Tag-based VLAN, 802.1ad QinQ VLAN Stacking
 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: 8
 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

Kreski

Zapraszamy do kontaktu! Więcej informacji: www.kreski.pl

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 IP Source Guard, DHCP Snooping, ARP Spoofing Prevention

ACL Access Control List (IP-ACL, MAC-ACL)
 Max. ACL Entries: 128

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, SFTP, 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

Note: For SFP copper type, only 1000Mbps supported.