EKI-7706G-2F
EKI-7706G-2FI

4GE+2SFP Gigabit Managed Redundant Industrial Switch

Features

- 4 Gigabit 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
- -40 ~ 85 °C wide-range operating temperature (EKI-7706G-2FI)
- Dual 12~48 V_{DC} power input and 1 relay output

Introduction

EKI-7706G-2F/2FI supports 4 Gigabit Ethernet ports and 2 SFP ports. It provides abundant ports to connect many devices and it is embedded with Advantech's IXM function, which benefits users with fast deployment and can dramatically save engineers time and costs. The EKI-7706G series also supports NMS to help IT managers with networking maintenance and failure prevention. Finally, the EKI-7706G series is equipped with X-Ring Pro which can achieve ultra-high-speed recovery times of less than 20 ms to ensure network stability.

Specifications

Interface

- **I/O Port** — 4 x 10/100/1000Base-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-7706G-2FI
  -10 ~ 60 °C (14 ~ 140 °F) EKI-7706G-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** — UL61010
- **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

L2 Features

- **L2 MAC Address** — 8K
- **Packet Buffer** — 4.1 Mbit
- **VLAN Group** — 256 (VLAN ID 1~4094)
- **VLAN Arrange** — Port 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]
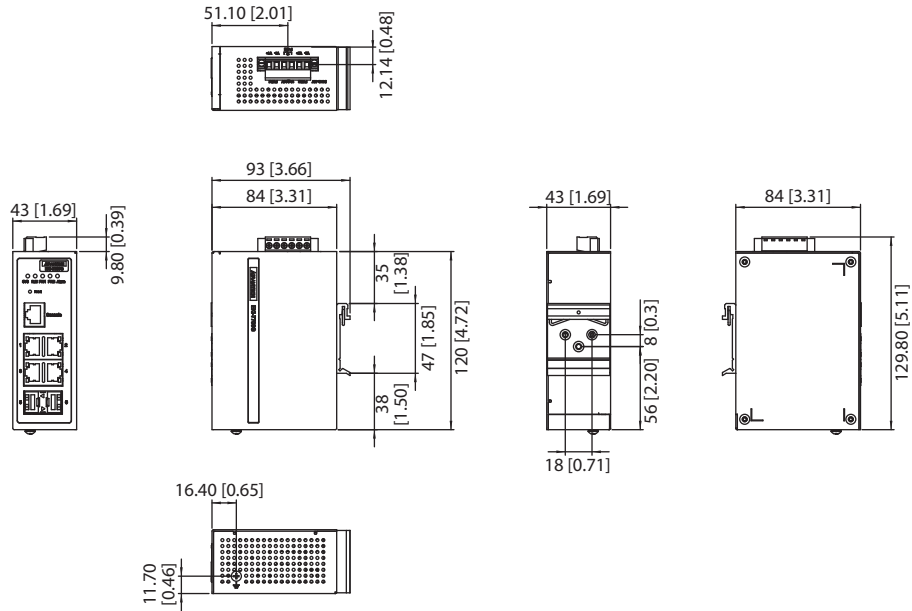
Panel Cut-out Dimensions: 84 (3.31) x 120 (4.72) x 43 (1.69)

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
▪ **Authentication**	802.1x (port-based, MD5/TLS/TTLS/PEAP encryption)

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-7706G-2FI-AE**	4GE + 2SFP Port Managed Ethernet Switch w/ Wide Temp
▪ **EKI-7706G-2F-AE**	4GE + 2SFP Port Managed Ethernet Switch