![Chipsmall logo]

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts,Customers Priority,Honest Operation,and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!

Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832
Email & Skype: info@chipsmall.com Web: www.chipsmall.com
Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China

EKI-7712E-4F
EKI-7712E-4FI

8FE+4SFP Port Gigabit Managed Redundant Industrial Switch

Features

- 8 Fast Ethernet ports + 4 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
- NEMA TS2 for Traffic Control
- EN50121-4 approval for Railway trackside deployment
- -40 ~ 75 °C wide-range operating temperature (EKI-7712E-4FI)
- Dual 12 ~ 48 V_{DC} power input and 1 relay output
- Support Security Pack to against internal and external cyber threats

Introduction

EKI-7712E-4F/4FI provides abundant ports to connect to many devices with 8 Fast Ethernet ports and 4 SFP (mini-GBIC) ports. It is embedded with Advantech's IXM function for fast deployment, which can dramatically save engineers time and cost. The EKI-7712E series also supports NMS to help IT managers with networking maintenance and failure prevention. Finally, the EKI-7712E series is equipped with X-Ring Pro which can achieve ultra high-speed recovery times of less than 20 ms to ensure network stability. The switch also features a wide -40 to 75 °C operating temperature (EKI-7712G-4FI) and NEMA TS2 rating, making the switch an ideal solution for use in traffic applications. EKI-7712E-4F/4FI has successfully passed the EN50121-4 European railway standard requirements for emissions and railway platform and trackside deployment.

Specifications

Interface

- **I/O Port** — 8 x 10/100Base-T/TX RJ-45
  4 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)** — 74 x 152 x 105 mm (2.91" x 5.98" x 4.13")

LED Display

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

Environment

- **Operating Temperature** — -40 ~ 75 °C (-40 ~ 167 °F) (7712E-4FI)
  -10 ~ 60 °C (-40 ~ 140 °F) (7712E-4F)
- **Storage Temperature** — -40 ~ 85 °C
- **Ambient Relative Humidity** — 10 ~ 95% (non-condensing)
- **Humidity** — 10 ~ 95% (non-condensing)

Power

- **Power Consumption** — 12.1W @ 48V_{DC} (System)
- **Power Input** — 12 ~ 48 V_{DC}, redundant dual power input
- **Fault Output** — 1 Relay Output
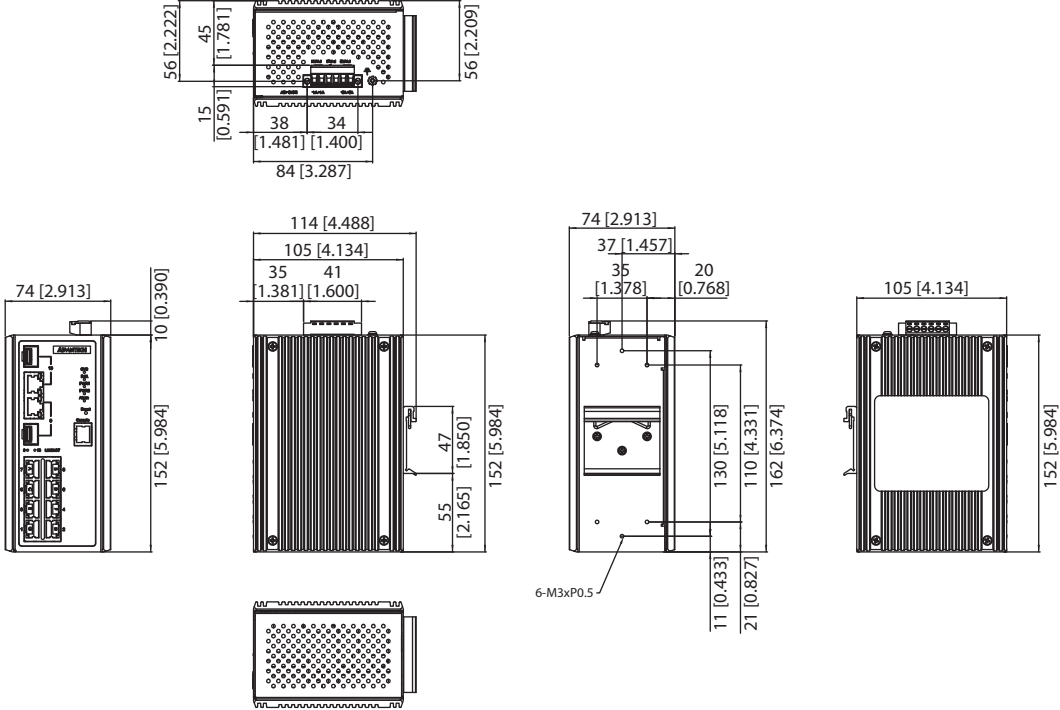
Certification

- **EMI** — CE, FCC Class A
- **Safety** — UL61010-2-201
  IEC60950*
- **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
  EN50121-4*
- **Shock** — IEC 60068-2-27
- **Freefall** — IEC 60068-2-32
- **Vibration** — IEC 60068-2-6
- **Traffic control** — NEMA TS2*

*= Compliant

L2 Features

- **L2 MAC Address** — 8K
- **Jumbo Frame** — 9216 Bytes
- **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

ADVANTECH | **Industrial Ethernet Solutions**

All product specifications are subject to change without notice.   Last updated: 17-May-2018

Dimensions

Unit: mm [inch]

Panel Cut-out Dimensions: 105 (4.137) x 152 (5.984) x 74 (2.91)

QoS

- **Priority Queue** / **Scheduling**   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, Option66/67/82
- **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-7712E-4FI-AE**   8FE + 4SFP Port Managed Ethernet Switch w/Wide Temp
- **EKI-7712E-4F-AE**   8FE + 4SFP Port Managed Ethernet Switch