## : ©hipsmall

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

## 4FE+4G SFP Port Gigabit Managed Redundant Industrial PoE Switch



## Feafures

- $4 \times$ IEEE 802.3 af/at PoE 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
- $-40 \sim 75^{\circ} \mathrm{C}$ wide-range operating temperature (EKI-7708E-4FPI)
- Dual 48 V $\operatorname{DC}$ power input and 1 relay output


## e6 5

## Introduction

EKI-7708E-4FP/4FPI supports 4 Fast Ethernet IEEE 802.3 af/at PoE ports and 4 SFP (mini-GBIC) ports. They can provide up to 30 watts per port to fulfill high power consumption PD (Power Device) requirements. They are embedded with Advantech's IXM function, which can benefit users for fast deployment and can dramatically save engineers time and cost. The EKI-7708E series also supports NMS to help IT managers with networking maintenance and failure prevention. Finally, the EKI-7708E series is equipped with X-Ring Pro which can achieve ultra high speed recovery time of less than 20 ms to ensure network stability. The switch also features a wide $-40^{\circ}$ to $75^{\circ} \mathrm{C}$ operating temperature (EKI-7708E-4FPI) and NEMA TS2 rating, making the switch an ideal solution for use in traffic applications. EKI-7708E-4FP/4FPI has successfully passed the EN50121-4 European railway standard requirements for emissions and railway platform and trackside deployment.

## Specifications

## Interface

- I/O Port
- Console port
- Power Connector


## Physical

- Enclosure
- Protection Class
- Installation
- Dimensions (W x H x D)

LED Display

- System LED
- Port LED

Environment

- Operating Temperature
- Storage Temperature
- Ambient Relative Humidity
- Humidity


## Power

- Power Consumption
- Power Input
- Power Budget
- Fault Output
$4 \times 10 / 100 B a s e-T / T X ~ R J-45$
$4 \times$ SFP (mini-GBIC) port
RS-232 (RJ45)
6 -pin screw Terminal Block (including relay)

Metal Shell
IP 30
DIN-Rail
$74 \times 152 \times 105 \mathrm{~mm}(2.91$ " $\times 5.98$ " $\times 4.13$ ")

PWR1, PWR2, SYS, Alarm and R.M. Link / Speed / Activity
$-40 \sim 75^{\circ} \mathrm{C}\left(-40 \sim 167^{\circ} \mathrm{F}\right)$ (7708E-4FPI)
$-10 \sim 60^{\circ} \mathrm{C}\left(-40 \sim 140^{\circ} \mathrm{F}\right)$ (7708E-4FP)
$-40 \sim 85^{\circ} \mathrm{C}$
10~95\% (non-condensing)
10~95\% (non-condensing)
12.1W @ 48V ${ }_{\text {Dc }}$ (System)
$48 \mathrm{~V}_{\text {Dc }}\left(46\right.$ to $\left.57 \mathrm{~V}_{\text {Dc }}\right)$,
$53-57 \mathrm{~V}$ oc is recommended for 802.3 at , redundant dual power input
120W
1 Relay Output

## Certification

- EMI
- EMC

EN 61000-4-4
EN 61000-4-5
EN 61000-4-6
EN 61000-4-8
EN50121-4
IEC 60068-2-27
IEC 60068-2-32
IEC 60068-2-6
NEMA TS2
http://www.advantech.com/legal/patent

8 K
9216 Bytes
256 (VLAN ID 1~ 4094)
Port based VLAN, Q-in-Q (VLAN Stacking), GVRP
Per port, Multi-source port,
IGMP Snooping v1/v2/v3, MLD
Snooping, IGMP Immediate leave
Broadcast, Multicast, Unknown unicast
IEEE 802.1D-STP, IEEE 802.1s-MSTP, IEEE 802.1w-RSTP, X-Ring Pro, with ultra high-speed recovery time less than 20 ms

## Dimensions

Unit: mm [inch]


Panel Cut-out Dimensions: $105 \times 152$ x 74 (4.134" x 5.98" x 2.913")

## QoS

- Priority Queue Scheduling
- Class of Service
- Rate Limiting
- Link Aggregation

Security

- Port Security
- Authentication

Static, Dynamic
802.1x (Port-Based, MD5/TLS/TTLS/PEAP Encryption)

## Management

- DHCP
- Access
- Security access
- Software upgrade
- NTP

WRR (Weighted Round Robin), SP (Strict Scheduling Priority) Hybrid Priority
IEEE 802.1p Based CoS, IP TOS, DSCP based CoS Ingress Rate limit, Egress Rate limit IEEE 802.3ad Dynamic Port Trunking, Static Port Trunking

## Ordering Information

- EKI-7708E-4FPI-AE 4 FE +4 G SFP Port Managed PoE Ethernet Switch w/ Wide Temp
- EKI-7708E-4FP-AE 4FE + 4G SFP Port Managed PoE Ethernet Switch

