

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-7708G-4FPI EKI-7708G-4FPI

4GE+4G SFP Port Gigabit Managed Redundant Industrial PoE Switch



Features

- 4 x IEEE 802.3 af/at PoE Gigabit 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-7708G-4FPI)
- Dual 48 V_{DC} power input and 1 relay output



Introduction

EKI-7708G-4FP/4FPI supports 4 Gigabit 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-7708G series also supports NMS to help IT managers with networking maintenance and failure prevention. Finally, the EKI-7708G 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° to 75°C operating temperature (EKI-7708G-4FPI) and NEMA TS2 rating, making the switch an ideal solution for use in traffic applications. EKI-7708G-4FP/4FPI has successfully passed the EN50121-4 European railway standard requirements for emissions and railway platform and trackside deployment.

Specifications

n	t	e	r	f	a	C	e

I/O Port 4 x 10/100/1000Base-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

-40 ~ 75°C (-40 ~ 167°F) (7708G-4FPI) -10 ~ 60°C (-40 ~ 140°F) (7708G-4FP)

• Storage Temperature $-40 \sim 85^{\circ}\text{C}$

Ambient Relative Humidity
 Humidity
 10 ~ 95% (non-condensing)
 10 ~ 95% (non-condensing)

Power

Power Consumption
 Power Input
 12.1W @ 48V_{DC} (System)
 48 V_{DC} (46 to 57 V_{DC}),

53 -57 V_{DC} is recommended for 802.3at,

redundant dual power input

Power Budget 120WFault Output 1 Relay Output

Certification

■ EMI CE, FCC Class A
■ 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

 Patent http://www.advantech.com/legal/patent

L2 Features

L2 MAC Address 8KJumbo Frame 9216 Bytes

VLAN Group 256 (VLAN ID 1 ~ 4094)

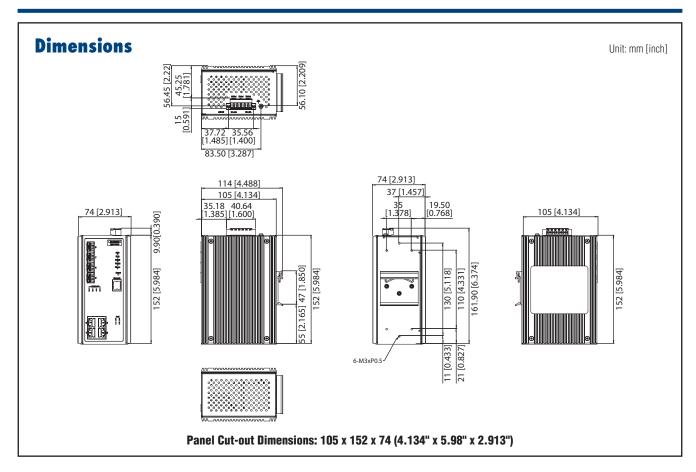
VLAN Arrange
 Port based VLAN, Q-in-Q (VLAN Stacking), GVRP

Port Mirroring
 IP Multicast
 Per port, Multi-source port,
 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



QoS

Priority Queue WRR (Weighted Round Robin), SP (Strict Scheduling
 Scheduling Priority) Hybrid Priority

Class of Service
 Rate Limiting
 IEEE 802.1p Based CoS, IP TOS, DSCP based CoS
 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, 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-7708G-4FPI-AE** 4GE + 4G SFP Port Managed PoE Ethernet Switch w/

Wide Temp

■ **EKI-7708G-4FP-AE** 4GE + 4G SFP Port Managed PoE Ethernet Switch