# **EKI-7758F**

# **8G port Industrial Managed Redundant Gigabit Ethernet Switch**



### **Features**

- All Gigabit Ethernet ports for 4 Copper and 4 SFP
- SFP sockets for easy and flexible fiber expansion
- Redundancy: Gigabit X-Ring (ultra high-speed recovery time<10ms), RSTP/STP (802.1w/1D)
- Management: Web, Telnet, Serial Console, Windows Utility, SNMP
- Control: VLAN/GVRP, QoS, IGMP Snooping/Query, LACP, Rate Limit
- Security: IP/MAC and port binding, DHCP Server, IP access list, 802.1X
- Diagnostic: Port statistic, Port Mirroring, RMON, Trap, E-Mail Alert, Syslog
- Dual 12 ~ 48 VDC power input and 1 Relay Output
- Robust mechanism and special heat spreader design



# Introduction

For many industrial automation applications, redundancy helps increase the reliability of your system. To create reliability in your network, the EKI-7758F comes equipped with a proprietary redundant network protocol -- X-Ring that was developed by Advantech, which provides users with an easy way to establish a redundant Ethernet network with ultra high-speed recovery time less than 10 ms. Furthermore, EKI-7758F also supports many advanced network standards to optimize network performance, ease maintenance issues, and secure network safety.

# **Specifications**

### **Communications**

Standard IEEE 802.3, 802.3u, 802.3x, 802.3z, 802.1D, 802.1w,

802.1p, 802.1Q, 802.1X, 802.3ad, 802.3ab - LAN 10/100/1000Base-TX, Optional 100Base-FX,

1000Base-SX/LX/LHX/XD/ZX/EZX Transmission Distance Ethernet: Up to 100m (4- wire Cat.5e, Cat.6 RJ-45

cable suggested for Gigabit port)

SFP: Up to 110 km (depends on SFP) Gigabit Copper:10/100/1000 Mbps, Auto-Negotiation Transmission Speed

SFP: Up to 1000 Mbps

#### Interface

Connectors 4 x RJ-45 (Ethernet)

4 x SFP (mini-GBIC) ports

6-pin removable screw terminal (Power&Relay) LED Indicators System: PWR, R.M., PWR1, PWR2, P-Fail

Gigabit Copper: Link/Activity, Speed

SFP: Link/Activity RS-232 (RJ-45) Console

### **Network Management**

Web browser, Telnet, Serial consloe, Windows Utility, TFTP, SNMPv1/v2c/v3, Port Speed/Duplex Configuration

Configuration

VLAN IEEE 802.1Q, GVRP, Port-based VLAN

 Redundancy ADVANTECH X-Ring (Recovery time< 10ms at 30pcs

full loading ring structure), Dual Homing, Couple Ring, 802.1w/D RSTP/STP

IP Access security, port security, DHCP Server, Port and IP Binding, 802.1X Port Access Control Security

 Traffic Control IGMP Snooping/Query for multicast group management Port Trunking, Static/802.3ad LACP

Rate limit and storm control

IEEE 802.1p QoS CoS/TOS/DSCP priority queuing

IEEE 802.3x flow control

Port Mirroring, Real-time traffic statistic, MAC Address Diagnostics

Table, SNTP, Syslog, E-Mail Alert, SNMP Trap, RMON

#### Mechanism

Enclosure IP30, metal shell with solid mounting kits

**Dimensions (W x H x D)** 72 x 152 x 105 mm Mounting DIN-rail, wall

**Power Consumption** Max. 17 W

**Power Input** 2 x Unregulated 12~ 48 V<sub>DC</sub>

 Fault Output 1 Relay Output

#### **Protection**

ESD (Ethernet) 4.000 Vpc Surge (EFT for power) 3,000 V<sub>DC</sub> **Power Reverse** Present

Overload 3.2A / 60V Replaceable Fuse

#### **Environment**

Operating Temperature -10~60° C (14~140° F)

Wide temp. model -40~75° C (-40~167° F) Storage Temperature -40~85° C (-40~185° F) **Operating Humidity** 5 ~ 95% (non-condensing)

**Storage Humidity** 0 ~ 95% (non-condensing) 289,777 hours

## **Certifications**

Safety UL 60950-1, CAN/CSA-C22.2 No.60950

EU: EN55011. EN61000-6-4 **EMC** EN55022 Class A,

EN61000-3-2/3 EN55024

IEC61000-4-2/3/4/5/6/8/11/12

EN61000-6-2 IEC60068-2-27 Shock IEC60068-2-32 Freefall Vibration IEC60068-2-6

# **Ordering Information**

EKI-7758F 8G port Industrial Managed Redundant Gigabit Ethernet

Switch