

EKI-6558

8-port 10/100 Mbps Industrial Managed Redundant Ethernet Switch

NEW



Features

- Redundant Ethernet Ring (recovery time < 100 ms at 50 pcs full loading ring structure) and RSTP (IEEE 802.1W)
- IGMP Snooping for filtering multicast traffic from industrial Ethernet
- Provides push button for port diagnostic
- Supports web browser and telnet/RS-232 console for configuration
- Supports IEEE 802.1Q VLAN and GVRP protocol to ease network planning
- Supports QoS -- IEEE 802.1p/1Q and TOS/DiffServ to increase determinism
- Supports SNMP V1 for network management security and Trap for automatic alarm and warning by utility or exception through email
- Supports 802.3ad link aggregation control protocol
- Provides 2-ch DI/O and power fail relay output for field event control
- Supports dual 10 ~ 48 V_{DC} power input, wide operating temperature (0 ~ 60° C)

Introduction

For many industrial automation applications, redundancy helps increase the reliability of your system. To create reliability in your network, the EKI-6558 comes equipped with a proprietary redundant network protocol -- Smart 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 30 ms. Furthermore, EKI-6558 also supports many advanced network standards to optimize network performance, ease maintenance issues, and secure network safety. With many additional industrial features such as dual wide power inputs (10 ~ 48 V_{DC}), a wide operating temperature (0 ~ 60° C) and a rugged, flexible design, the EKI-6558 is an ideal Ethernet solution for any industrial environment.

Specifications

Communications

- **Standard** IEEE 802.3, 802.3ad, 802.3u, 802.3x, 802.1p, 802.1Q, 802.1W
- **LAN** 10/100Base-TX
- **I/O Type**
 - 2 Digital Input - Logic Level 0 : close to GND
Logic Level 1 : open
 - 2 Digital Output - Open collector to 30 V, 200 mA (Max. load)
- **Transmission Distance** Up to 100 m
- **Transmission Speed** Up to 100 Mbps

Interface

- **Connectors**
 - 8 x RJ-45 (Ethernet)
 - 7-pin removable screw terminal (power)
 - 5-pin removable screw terminal (DI/O)
- **LED Indicators** P1, P2, P-Fail, Fault, LINK, 10/100 Mbps
- **Console** RS-232 (RJ-48)

Network Management

- **Diagnostics**
 - Push button for port diagnostic
 - Port Mirroring
 - Real-time traffic statistic
- **VLAN** IEEE 802.1Q tagged VLAN
Port-based VLAN
- **Configuration** Web browser, Telnet/Serial console, Speed/duplex auto-negotiation
- **Redundancy** ADVANTECH Smart Ring (recovery time < 100 ms at 50 pcs full loading ring structure), 802.1W/D RSTP/STP
- **Security** MAC-based security per port
- **Traffic Control** IGMP Snooping for multicast group management
IEEE 802.3ad Link Aggregation
Rate limit and storm control
IEEE 802.1p QoS DSCP/TOS/CoS priority queuing
IEEE 802.3x flow control

Mechanism

- **Enclosure** IP30, ABS+PC with solid mounting kits
- **Dimensions (W x H x D)** 46 x 162 x 126 mm
- **Mounting** DIN 35 rail, wall

Power

- **Power Consumption** Max. 8 W
- **Power Input** 2 x Unregulated 10 ~ 48 V_{DC}
- **Fault Output** 1 Relay Output

Protection

- **ESD (Ethernet)** 4,000 V_{DC}
- **Surge (EFT for power)** 3,000 V_{DC}
- **Power Reverse** YES
- **Overload** 4 A/125 V Replaceable Fuse

Environment

- **Operating Temperature** 0 ~ 60° C (32 ~ 140° F)
- **Storage Temperature** -10 ~ 70° C (14 ~ 158° F)
- **Operating Humidity** 20 ~ 95% (non-condensing)
- **Storage Humidity** 0 ~ 95% (non-condensing)
- **MTBF** 230,000 hours

Certifications

- **Safety** UL 60950-1, CAN/CSA-C22.2 No.60950
- **EMC** EU: EN55011, EN61000-6-4
EN55022 Class A,
EN61000-3-2/3
EN55024
IEC61000-4-2/3/4/5/6/8/11
EN61000-6-2

Ordering Information

- **EKI-6558** 8-port 10/100 Mbps Industrial Managed Redundant Ethernet Switch