EKI-7654C

4+2G Combo Port Gigabit Managed Redundant Industrial Ethernet Switch



Features

- 2 Gigabit Copper/SFP combo ports, plus 4 Fast Ethernet ports
- Full/half duplex mode flow control
- MDI/MDI-X auto crossover
- SFP socket for Easy and Flexible Fiber Expansion
- Redundancy: Gigabit X-Ring (ultra high-speed recovery time < 10 ms), 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, SNMPv3 Diagnostic: Port Statistic, Port Mirroring, RMON, SNMP Trap, SMTP, Syslog
- Dual 12 ~ 48 V_{DC} 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-7654C 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-7654C 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 100 m (4- wire Cat.5e, Cat.6 RJ-45 cable suggested for Gigabit port)

SFP: Up to 110km (depends on SFP) Ethernet: 10/100Mbps Auto-Negotiation

 Transmission Speed Ethernet: 10/100Mbps Auto-Negotiation Gigabit Copper: 10/100/1000 Mbps, Auto-Negotiation Gigabit Fiber: Up to 1000 Mbps

Interface

Connectors
 4 x RJ-45 (Ethernet) 2 x RJ-45/SFP (mini-GBIC) combo ports 6-pin removable screw terminal (Power & Relay)
 LED Indicators
 System: PWR, PWR1, PWR2, R.M., P-Fail

System: PWR, PWR1, PWR2, R.M., P-Fail 10/100TX: Link/Activity, Duplex/Collision Gigabit Copper: Link/Activity, Speed (1000Mbps)

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

Network Management

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

VLAN IEEE 802.1Q, GVRP, Port-based VLAN

Redundancy

ADVANTECH X-Ring (Recovery time < 10 ms at 50pcs full loading ring structure), Dual Homing, Couple Ring,

802.1w/D RSTP/STP

Security IP Access security, port security, DHCP Server, Port and IP

Binding, 802.1X Port Access Control

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

storm controlIEEE 802.1p QoS CoS/TOS/DSCP priority queuingIEEE 802.3x flow control

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Diagnostics
 Port Mirroring, Real-time traffic statistic, MAC Address
 Table, SNTP, Syslog, E-Mail Alert, SNMP Trap, RMON

Mechanism

Enclosure
 IP30, metal shell with solid mounting kits

Dimensions (W x H x D)
 Mounting
 Mounting

Power

Power Consumption Max. 10.7 W

Power Input
 Fault Output
 2 x Unregulated 12~ 48 V_{DC}
 1 Relay Output

Protection

ESD (Ethernet) 4,000 V_{DC} Surge (EFT for power) 3,000 V_{DC} Power Reverse Present

Overload
 1.6A @ 12 V_{DC} (Re-settable Fuse)

Environment

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

Certifications

Safety
 UL 60950-1, CAN/CSA-C22.2 No.60950
 EMC
 U.S.A.: FCC Part 15 CISPR 22

EU: EN55011, EN6100-6-4 EN55022 Class A, EN61000-3-2/3 EN55024

IEC61000-4-2/3/4/5/6/8 EN61000-6-2/4 IEC60068-2-27

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

Ordering Information

■ EKI-7654C 4+2G combo ports Industrial Managed Redundant Gigabit Ethernet Switch