EKI-4654R

24 FE + 2 SFP (Mini-GBIC) Managed Redundant Ethernet Switch

Features

- IEC61850-3 & IEEE 1613 compliant
- 1U 19" rack mount
- 2 x 1000Base SFP ports, plus 24 Fast Ethernet ports
- Redundancy: X-Ring (ultra high-speed recovery time < 10 ms), RSTP/ STP (802.1w/1D)
- Fully integrated, dual-redundant power supply: 2 x 100 ~ 240 V_{AC}/100 ~ 240 V_{DC}
- Fanless design
- Front panel LEDs simplify the monitoring and management
- Rear-end wiring with LED indicator
- Wide operating temperature from -40 ~ 85°C

Introduction

EKI-4654R is compliant with the IEC61850-3 & IEEE 1613 certifications for power automation systems and supports 24 Fast Ethernet ports and 2 x 1000Base SFP slots for different SFP modules for various application. EKI-4654R has long range voltage redundancy power input which provides convenient and uninterrupted power supply. EKI-4654R also supports many advanced network standards to optimize 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
- **LAN** 10/100Base-T(X), Optional 1000Base-SX/LX/LHX/XD/ZX/EZX
- **Transmission Distance** Ethernet: Up to 100m (4- wire Cat.5e) SFP: Up to 110 km (depends on SFP)
- **Transmission Speed** Ethernet: 10/100Mbps Auto-Negotiation Copper:10/100 Mbps, Auto-Negotiation Fiber: Up to 1000 Mbps

Interface

- **Connectors** 24 x 10/100 Base-TX + 2 x SFP(mini-GBIC) ports
- **LED Indicators** System: PWR, PWR1, PWR2, PWR3, R.M., P-Fail 10/100 T(X): Link/Activity, Duplex/CollisionGigabit Copper: Link/Activity, Speed SFP: Link/Activity
- **Console** RS-232 (RJ-45)

Network Management

- **Configuration** Web browser, Telnet, Serial console, TFTP, SNMP v1/v2c/v3, Port Speed/Duplex Configuration
- **VLAN** IEEE 802.1Q, GVRP, Port-based VLAN
- **Redundancy** Advantech X-Ring (Recovery time < 10ms at 30 pcs 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 LACP Rate limit and storm control IEEE 802.1p QoS CoS/TOS/DSCP priority queuing IEEE 802.3x flow control
- **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)** 440 x 44 x 280 mm
- **Mounting** 1U 19" Rack mount

Power

- **Power Consumption** Max. 36 W
- **Power Input** 2 x 100 ~ 240 V_{AC}/100 ~ 240 V_{DC} (Redundancy)
- **Fault Output** 1 Relay Output

Protection

- **Power Reverse** Present
- **Overload** 3.15 A @ 110 V (Fuse)

Environment

- **Operating Temperature** -40 ~ 85°C (-40 ~ 185°F)
- **Storage Temperature** -40 ~ 85°C (-40 ~ 185°F)
- **Operating Humidity** 5 ~ 95% (non-condensing)
- **Storage Humidity** 0 ~ 95% (non-condensing)
- **MTBF** 284,409 hours

Certifications

- **Safety** UL 60950-1, CAN/CSA-C22.2 No.60950
- **EMC** U.S.A.: FCC Part 15 CISPR 22 EU: EN55011, EN61000-6-4, EN55022 Class A, EN61000-3-2/3, EN55024, IEC61000-4-2/3/4/5/6/8, EN61000-6-2/4
- **Shock** IEC60068-2-27
- **Freefall** IEC60068-2-32
- **Vibration** IEC60068-2-6
- **Substation** IEC61850-3, IEEE 1613

Ordering Information

- **EKI-4654R** 24+2 SFP Managed Redundant Ethernet Switch