EKI-9228G-8CMI EKI-9228G-8COI

Industrial Rackmount L2 Managed Switch with 48 V_{DC}

Industrial Rackmount L2 Managed Switch with AC/nc



Features

- 16 x Gigabit RJ-45 ports + 4 Gigabit x SFP ports + 8 x Gigabit combo ports
- SFP socket for easy and flexible fiber expansion
- Management: SNMP v1/v2c/v3, WEB, Telnet, standard MIB
- Security: 802.1x (port-based, MD5/TLS/TTLS/PEAP encryption), HTTPS, SSH, and SNMPv3
- Redundancy: Gigabit X-Ring Pro (ultra-high-speed recovery time, <20 ms), RSTP/STP (802.1w/1D), MSTP
- Dual power input and 2 x relay output
- Wide-range operating temperature of -40 ~ 85°C



Introduction

The EKI-9228G series are designed for power substation automation applications requiring IEC 61850-3 certification. Thanks to its -40 ~ 85°C wide operating temperature range, these switches can operate reliably in extremely harsh environments. Designed with 16 Gigabit ports, 4 Gigabit SFP ports, and 8 Gigabit ports, it provides abundant and flexible connection options. Finally, the EKI-9228G series feature dual power inputs to ensure system stability and 2 relay outputs for greater user flexibility.

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 RJ45

cable suggested for Gigabit port)

SFP: Up to 110 km (depends on SFP)

• **Transmission Speed** Ethernet: 10/100 Mbps Auto-Negotiation

Gigabit Copper: 10/100/1000 Mbps, Auto-Negotiation

Gigabit Fiber: Up to 1000 Mbps

Interface

Connectors
 16 x RJ45 (Ethernet)

8 x RJ45/SFP (mini-GBIC) combo ports

4 x SFP Ports

3-pin removable screw terminal (Power) 4-pin removable screw terminal (Relay)

• **LED Indicators** 10/100T (X): Link/Activity, Duplex/Collision

Gigabit Copper: Link/Activity, Speed (1000 Mbps)

SFP: Link/Activity

Console
 RS-232 (RJ45)

Mechanism

Enclosure IP30, metal shell with solid mounting kits
 Dimensions (W x H x D) 442 x 44 x 352 mm (17.4" x 1.73" x 13.85")

Mounting
 1U 19" Rack mount

Power

Power Consumption
 EKI-9228G-8CMI: 19.21 W @ 48V
 EKI-9228G-8COI: 19.24 W @ 110V_{AC}

■ Power Input EKI-9228G-8CMI: 48V_{DC}

EKI-9228G-8C0I: 90 ~ 264AC/88 ~ 370V_{DC}

• Fault Output 2 Relay Outputs

Protection

Power Reverse PresentOverload Current Present

Environment

Operating Temperature
 Storage Temperature
 Operating Humidity
 Storage Humidity
 Storage Humidity
 Operating Humidity
 Operating Humidity
 Operating Humidity
 Operating Temperature
 Operating Temperature
 Operating Humidity
 Operating Temperature
 Operating Temperature

Certification

Safety UL 60950

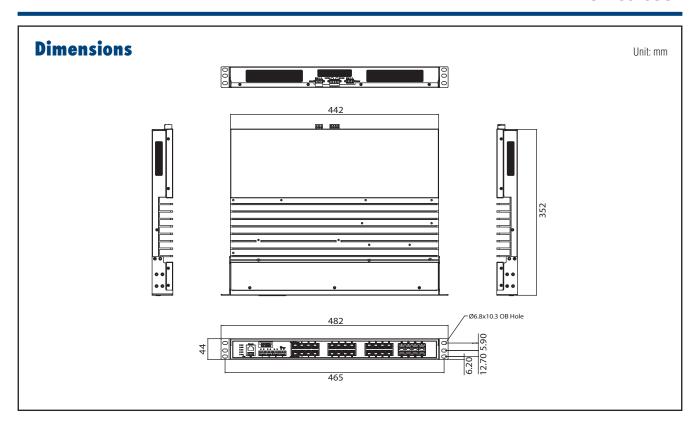
■ EMI CE FCC EN55022 Class A

■ **EMS** EN 61000-4-2 EN 61000-4-3

EN 61000-4-5 EN 61000-4-5 EN 61000-4-6

EN 61000-4-6 EN 61000-4-8 • Shock IEC 60068-2-27 • Freefall IEC 60068-2-32

VibrationPower AutomationIEC 60068-2-6IEC 61850-3



L2 Features

L2 MAC AddressJumbo Frame9KB

■ VLAN Group 4093 (VLAN ID 1~4093)

VLAN
 Mac based VLAN, Protocol based VLAN, IP subnet

based VLAN, Port based VLAN, GVRP

Port Mirroring
 Per port, Multi-source port

■ IP Multicast IGMP Snooping v1/v2/v3, MLD Snooping, IGMP

Immediate leave

Storm Control
 Broadcast, Multicast, Unknown unicast
 Departing Transport
 Property Transport
 Storm Control
 Broadcast, Multicast, Unknown unicast
 Transport
 Storm Control
 Broadcast, Multicast, Unknown unicast
 Transport
 Storm Control
 Stor

• **Spanning Tree** IEEE 802.1D-STP, IEEE 802.1s-MSTP, IEEE

802.1w-RSTP, X-Ring Pro

QoS

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

Class of Service IEEE 802.1p based CoS, IP TOS, DSCP based CoS

• Rate Limiting Egress Rate limit, Ingress Rate limit

• Link Aggregation IEEE 802.3ad Dynamic Port Trunking, Static Port

Trunking

Security

Port Security Static, Dynamic

Authentication
 802.1x (Port-Based), RADIUS, TACACS+

ACL 550 rulesAdvanced Security IP Source Guard

Management

DHCP Client, Server, Relay, Option 66/67

Access
 SNMP v1/v2c/v3, WEB, Telnet, RMON, Standard MIB,

Private MIB

Security Access
 Software Upgrade
 SSH 2.0, SSL
 TFTP, HTTP, Dual Image

• NTP NTP client

Ordering Information

EKI-9228G-8CMI-AEEKI-9228G-8COI-AE

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Ind. Rackmount L2 Managed Switch with AC/DC