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

Industrial Rackmount L2 Managed Switch with 48 V_{DC}

Industrial Rackmount L2 Managed Switch with AC/$_{DC}$

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-8COI: 90 ~ 264AC/88 ~ 370V_{DC}
Fault Output	2 Relay Outputs

Protection

Power Reverse	Present
Overload Current	Present

Environment

Operating Temperature	-40 ~ 85°C (-40 ~ 185°F)
Storage Temperature	-40 ~ 85°C (-40 ~ 185°F)
Operating Humidity	10 ~ 95% (non-condensing)
Storage Humidity	10 ~ 95% (non-condensing)

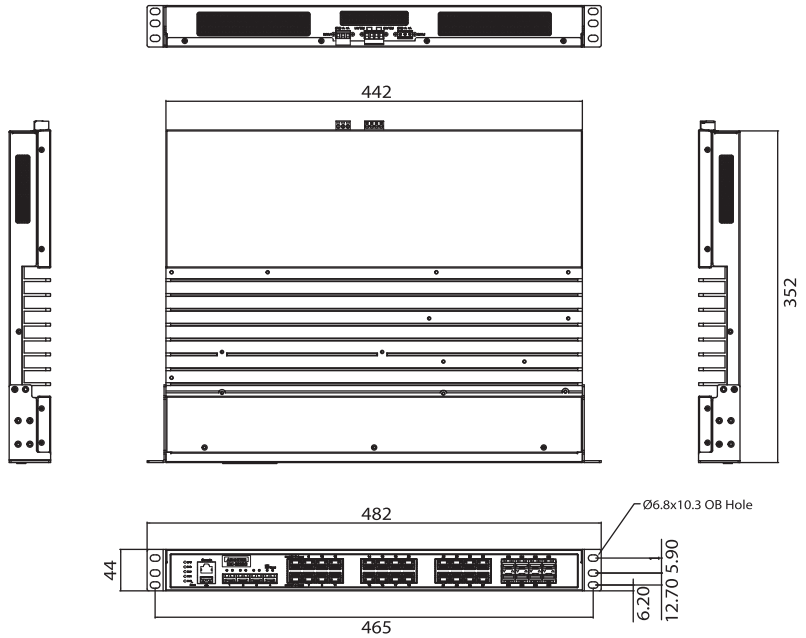
Certification

Safety	UL 60950
EMI	CE FCC EN55022 Class A
EMS	EN 61000-4-2 EN 61000-4-3 EN 61000-4-4 EN 61000-4-5 EN 61000-4-6 EN 61000-4-8
Shock	IEC 60068-2-27
Freefall	IEC 60068-2-32
Vibration	IEC 60068-2-6
Power Automation	IEC 61850-3

All product specifications are subject to change without notice.
Last updated: 27-Jun-2018

Dimensions

Unit: mm



L2 Features

- **L2 MAC Address** 16K
- **Jumbo Frame** 9KB
- **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
- **Spanning Tree** IEEE 802.1D-STP, IEEE 802.1s-MSTP, IEEE 802.1w-RSTP, X-Ring Pro

QoS

- **Priority Queue Scheduling** WRR (Weighted Round Robin), SP (Strict Priority)
- **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 rules
- **Advanced 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** SSH 2.0, SSL
- **Software Upgrade** TFTP, HTTP, Dual Image
- **NTP** NTP client

Ordering Information

- **EKI-9228G-8CMI-AE** Ind. Rackmount L2 Managed Switch with 48VDC
- **EKI-9228G-8COI-AE** Ind. Rackmount L2 Managed Switch with AC/DC