EKI-9226G-20FMI
EKI-9226G-20FOI

Ind. Rackmount L2 Managed Switch with 48V$_{DC}$

Ind. Rackmount L2 Managed Switch with AC/DC

Features

- 20 x Gigabit SFP ports + 6 x Gigabit x RJ-45 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 relay output
- -40 ~ 85˚C wide-range operating temperature

Introduction

The EKI-9226G series are designed for power substation automation applications which meet IEC 61850-3 certification. Thanks to its -40 ~ 85˚C wide operating temperature it can operate well in extremely harsh environments. Designed with 20 Gigabit SFP ports and 4 Gigabit RJ-45 ports.It provides abundant and flexible connection ports. Finally, the EKI-9226G series contain dual power inputs to ensure system stability and 2 relay output 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-T (X), 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** Gigabit Copper: 10/100/1000 Mbps, Auto-Negotiation Gigabit Fiber: Up to 1000 Mbps

Interface

- **Connectors** 6 x RJ45 (Ethernet)
20 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)** 438 x 44 x 315.2 mm
- **Mounting** 1U 19" Rack mount

Power

- **Power Consumption** 35W
- **Power Input** EKI-9226G-20FMI: 48V$_{DC}$
EKI-9226G-20FOI: 90 ~ 264$_{AC}$/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 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

Dimensions

Unit: mm [inch]
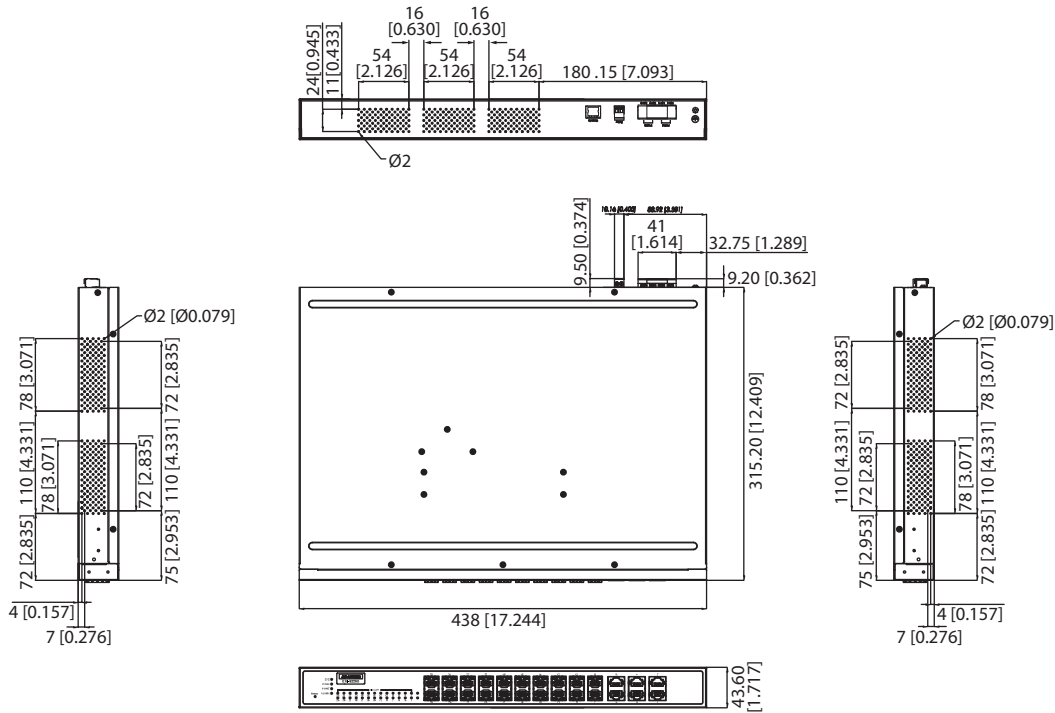
L2 Features

- **L2 MAC Address** — 8K
- **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-9226G-20FMI-AE** — Ind. Rackmount L2 Managed Switch with 48VDC
- **EKI-9226G-20FOI-AE** — Ind. Rackmount L2 Managed Switch with AC/DC