

# EKI-9520G

## EN 50155 20-port Ethernet Switch

### Preliminary



### Features

- EN50155 L2 & L3 models
- M12 connector with IP67 rugged housing
- Complies with EN50155 & EN50121-3-2
- Complies with EN45545-2 & EN61373
- Supports PoE IEEE802.3af/at(PoE model)
- Wide nominal power input range: 24~110V<sub>DC</sub>  
Operating power input range: 16.8~137.5V<sub>DC</sub>
- Operating temperature:-40 ~ 70°C
- Support IEC 61076-2-010 push-pull M12 connectors

## Specifications

### Interface

- **Ethernet Port\***
  - M12 4pin D-coded for Fast Ethernet (10/100BASE-T)
  - M12 8pin X-coded for Gigabit Ethernet (10/100/1000BASE-T)
- **Console port**
  - M12 5pin A-coded (Management model only)
- **Power Connector**
  - M12 5pin K-coded

### Physical

- **Enclosure**
  - Die-cast zinc front panel and extruded aluminum chassis
- **Protection Class**
  - IP67
- **Installation**
  - Wall Mount
- **Dimensions**
  - 178 x 160 x 67.2 mm (W x H x D)

### LED Display

- **System LEDs**
  - PWR1, PWR2, SYS.  
Alarm & R.M.
- **Port LED**
  - Data, PoE

### Environment

- **Operating Temperature**
  - 40 ~ 70°C (-40 ~ 158°F)
- **Storage Temperature**
  - 40 ~ 85°C (-40 ~ 185°F)
- **Ambient Relative Humidity**
  - 5~ 95% (non-condensing)

### Power (PoE Model)

- **Power Consumption**
  - 20W (w/o PoE)
- **Nominal Input voltage**
  - 24/28/36/48/72/96/110V<sub>DC</sub>
- **Operating range**
  - 16.8~137.5V<sub>DC</sub>
- **Over current protection**
  - Yes
- **Reverse polarity protection**
  - Yes
- **PoE Ports**
  - 16
- **PoE Power Budget**
  - 24-48V: 90W  
72-110V: 120W

### Certification

- **Safety**
  - EN62368-1
- **EMC**
  - CE, EN55011/ 55032/ 55035; FCC Part 15 Subpart B class A
- **EMS**
  - EN61000-4-2 (ESD);  
EN61000-4-3 (RS);  
EN61000-4-4 (EFT);  
EN61000-4-5 (Surge);  
EN61000-4-6 (CS)
- **Shock**
  - EN61373
- **Vibration**
  - EN61373
- **Freefall**
  - IEC60068-2-31
- **Railway**
  - EN50155, EN 50121-3-2
- **Fire protection**
  - EN45545-2, NFPA-130
- **Cyber certificate\***
  - IEC 62443-4-2
- **Other**
  - EN61000-6-4, EN61000-6-2

### Switch Properties

- **DRAM**
  - 1GB
- **Flash**
  - 128MB
- **Max. IGMP group**
  - 256
- **Max static VLANs**
  - 256
- **VLAN ID range**
  - 1-4094
- **MAC table**
  - 16K
- **Jumbo frame**
  - 12KB
- **Packet buffer**
  - 12Mb
- **Max priority queues**
  - 8

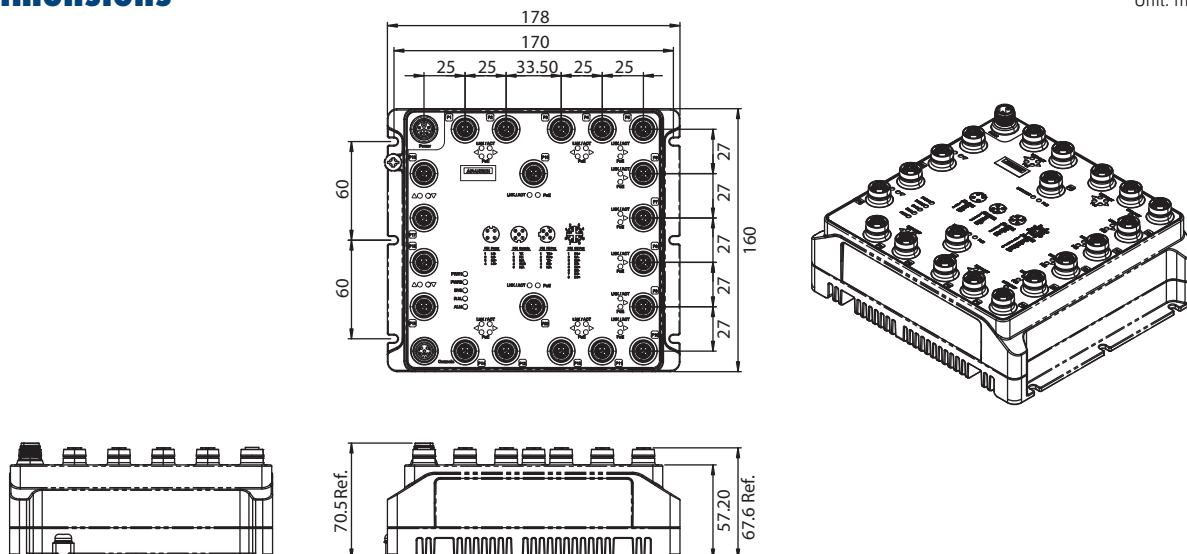
### L2 Features

- **L2 MAC Address**
  - 16K
- **Jumbo Frame**
  - 12KB
- **VLAN Group**
  - 256 (VLAN ID 1~4094)
- **VLAN**
  - 802.1Q 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
- **Redundancy Protocol**
  - IEEE 802.1D-STP, IEEE 802.1s-MSTP, IEEE 802.1w-RSTP, X-Ring Pro

\*Certification is on-going.

## Dimensions

Unit: mm [in.]



### 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
- **Link Aggregation** IEEE 802.3ad Dynamic Port Trunking, Static Port Trunking

### Security

- **Port Security** Static, Dynamic
- **Authentication** 802.1x (Port-Based, MAC-Based), RADIUS, TACACS+
- **Advanced Security** IP Source Guard, Access control list

### Management

- **DHCP** Client, Server, 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 server/client
- **DNS** DNS server/client

### L3 Specification (L3 models)

- **NAT** SNAT, DNAT
- **Routing** Static routing, OSPF v2
- **Routing Redundancy** VRRP

## Accessories

PN		Description
OPT1-M12-CRP-4MD		Phoenix Contact M12 D-code 4 pin Male crimp type connector
OPT1-M12-CRP-8MX		Phoenix Contact M12 X-code 8 pin Male crimp type connector
OPT1-M12-CRP-5MA		Phoenix Contact M12 A-code 5 pin Male crimp type connector
OPT1-M12C-4MD-150R		M12 D-code 4 pin Male to RJ45, cable length: 1.5m
OPT1-M12C-8MX-150R		M12 X-code 8 pin Male to RJ45, cable length: 1.5m
OPT1-M12C-5MA-DB9		M12 A-code 5 pin Male to DB9 console, cable length: 1.5m
OPT1-M12C-5FK-150		M12 K-code 5 pin Female power cable 1.5m

## Ordering Information

Part Number	Function	10/100BASE-T	10/100BASE-T with PoE	10/100/1000BASE-T	10/100/1000BASE-T with PoE
EKI-9520E-4GRPW-A	L3		16(P1-16)	4(P17-20)	
EKI-9520E-4GRW-A	L3	16(P1-16)		4(P17-20)	
EKI-9520G-MPW-A	L2			4(P17-20)	16(P1-16)
EKI-9520G-MW-A	L2			20(P1-20)	
EKI-9520E-4GMPW-A	L2		16(P1-16)	4(P17-20)	
EKI-9520E-4GMW-A	L2	16(P1-16)		4(P17-20)	

\* Bypass models are by request