

Product Description

The KBC ESMGS16-P4-RNN-B series is a high performance, managed Gigabit switch with 16 x 802.3at PoE+ Gigabit downlink ports and 4 Gigabit uplink SFP ports. It is designed for large scale IP surveillance applications and networks. Each PoE port (up to 30W) satisfies the high-power consumption requirement of a PoE IP camera. PoE budget is up to 480W. The switch is also ideal for applications requiring Power Sourcing Equipment (PSE) functionality, such as IP switches, routers and hubs, CCTV DVR, home networking and industrial Ethernet. Automatic identification of the Powered Device (PD) maintains a reliable power supply to external devices. The switch supports rich network functionalities such as ERPS, VLAN, RSTP, rate limiting, port security, SNMP etc.



The KBC ESMGS16-P4-RNN-B Ethernet switch is available as a 1U rack unit.

Product Features

- 16 PoE+ Gigabit downlink copper ports and 4 Gigabit uplink SFP ports
- Web-based layer 2 network management and PoE management by simple operation
- IEEE802.3af/at PoE
- IEEE802.3az energy efficient Ethernet
- ITU-T G.8032 Ethernet ring protection, as well as STP, RSTP and MSTP
- Command Line Interface (CLI) for fast configuration of major management functions
- DHCP Option 82 for IP address assignment with different policies, DHCP snooping
- IGMP snooping and MLD snooping for constraining multicast traffic
- Private VLAN and IEEE802.1Q VLAN
- Lock port function based on MAC address for blocking unauthorized access; IP & MAC ACL
- IEEE802.3ad LACP for optimum bandwidth utilization
- QoS (IEEE802.1p/1Q and TOS/DiffServ) to increase determinism
- TACACS+, SNMPv3, IEEE 802.1X, HTTPS, and SSH to enhance network security
- SNMPv1/v2c/v3 for different levels of network management
- RMON for efficient network monitoring and proactive capability
- Port mirroring for online debugging
- High-speed data forwarding, suitable for large flow of video data forwarding in security surveillance
- IP30 enclosure protection
- Quick Installation, simple operation, convenient for desk or rack installation

Specifications

Specifications

IEEE Standards

IEEE802.3
IEEE802.3u
IEEE802.3z
IEEE802.3ab
IEEE802.3X
IEEE802.3ad
IEEE802.1Q
IEEE802.1p
IEEE802.1D
IEEE802.1X
IEEE802.1w
IEEE802.1s
IEEE802.3af&at
IEEE802.3az

Ports ⁽¹⁾

10/100/1000Base-T(X) Downlink
1000Mbps SFP Uplink (SX or LX)

RJ45 (16)
SFP (4)

PoE

Standard
PSE Type
Power Pin Assignment
PoE Power Output
PoE Budget

IEEE 802.3af/at
End-span
1/2(+), 3/6(-)
30 watts max. per port
480W max.

Switch Performance

Architecture
Capacity
Throughput
Mac Table
Memory Buffer
IGMP Group

Store-and-forward
128Gbps
42Mpps
32k
32M
1016

Layer 2 Functions

Management interface

Web-based GUI and CLI; SSH;
Telnet
SNMP v1, v2 & v3
NTP Server/Client; SNTP

Port configuration

Port enable/disable; Full duplex;
Speed configuration;
Flow control enable/disable;

VLAN

Port naming
802.1Q VLAN protocol;
port-based VLAN; 4K VLAN

Layer 2 Functions (cont.)

Quality of Service (QoS)

QoS Congestion Management;
15 priority queues; SP, WRR and
SP+WRR queue scheduling;
802.1p CoS/DSCP priority
IGMP v1/v2/v3, IGMP snooping, and
MLI snooping
Total power control; PoE On/Off;
Output port and priority
MAC, port & VLAN binding
combinations; 802.1X;
MAC address auto-learning, aging and
filtration;
Port isolation, port speed limit;
Link aggregation;
Radius centralized password mgmt.
TFTP/WEB load upgrade;
Traffic statistics;
MAC address table query (ACL);
IP address modifications (ACL);
Username and password
modification; History and log;
System Configuration Backup;
Recover the default factory settings

Multicasting

PoE

Security

System

Power ⁽²⁾

Power Input
Power Consumption

46-57Vdc
<30W (without PoE)

Environmental

Operating Temperature
Storage Temperature
Operating Humidity

-40 °C ~ +75 °C
-40 °C ~ +85 °C
5% to 95% non-condensing
IP30 enclosure

Mechanical

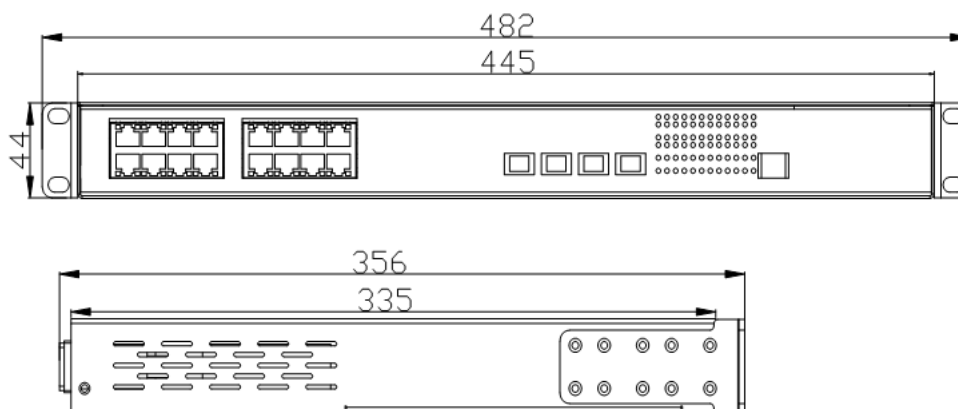
Dimensions (L x W x H)
Weight

445mm x 335mm x 44mm
5.8Kg

Protection

Lightning protection
ESD

6KV Execute: IEC61000-4-5
6KV Contact discharge;
8KV Air discharge;
Execute: IEC61000-4-2



Order Information

ESMGS16-P4-RNN-B

1. SFP module sold separately
2. Power supply sold separately

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