



Product Description

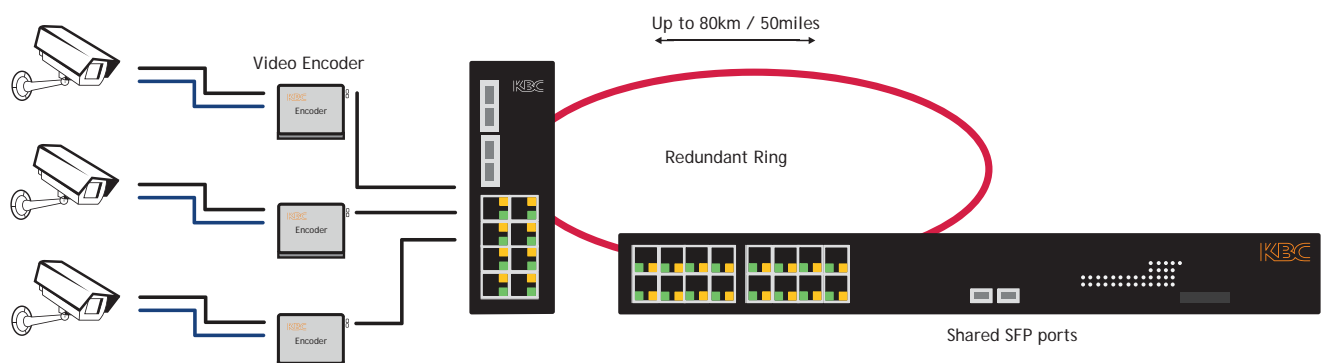
The KBC ESMGS16-P2 series is a high performance, 16 port, industrial, managed Gigabit switch with 16 x 802.3at PoE+ ports and 2 SFP ports. It is designed for medium to large-scale IP surveillance applications and networks. Each PoE port (up to 30W) satisfies the high power consumption requirement of a PoE IP camera. 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 KBC ESMGS16-P2 series supports rich network functionalities such as port mirroring, VLAN, trunking, RSTP, rate limiting, port security, SNMP etc.

The ESMGS16-P2 Ethernet switch is available as a 1U rack unit and as a standard, commercial grade or extended temperature unit.

Product Features

- 480W PoE budget
- 4k VLANs and 8k MAC addresses
- Configurable through web-based or SNMP or CLI
- Virtual LAN support (Port based VLAN and IEEE 802.1Q)
- VLAN Q-in-Q support (For VLAN stacking)
- Rapid Spanning Tree Protocol (IEEE 802.1W) for avoidance of network ring and redundancy (recovery time < 2s)
- Port trunking (Link aggregation) for high-speed backbone & redundancy (recovery time < 10 ms)
- LACP support (Dynamic port trunking or aggregate)
- QoS (Quality of Service) support (802.1p, DiffServ, TOS, Port-based, MAC-based)
- Rate limiting (Broadcast storm control)
- Port mirroring
- IGMP Snooping functionality
- Port security
- Symmetric pause & backpressure flow control

Typical System Configuration



Specifications

Standards

IEEE Standards

IEEE802.3 10Base-TX
IEEE802.3u 100Base-TX
IEEE802.3u 1000Base-TX
IEEE 802.1x
IEEE 802.1w RSTP
IEEE 802.1D STP
IEEE 802.1p CoS priority
IEEE 802.1Q VLAN
IEEE 802.1ab 2005 LLDP
Protocol
IEEE 802.3 2005
10/100/1000M Ethernet
Protocol

Ports

10/100/1000Base-T(X)
SFP
Port configuration
Port speed

RJ45 (16)
SFP (2); 1000Base-SX/LX/BX
Auto MDI / MDI-X
Auto-negotiate

Switch Performance

Architecture
Fabric
Throughput
Mac address table
Share data buffer
Jumbo frame size
Flow control

Store-and-forward
46Gbps non-blocking
35.7Mbps @64Bytes
8k
500kbytes
10kbytes
IEEE 802.3X Pause frame for
full-duplex back pressure for
half-duplex

Layer 2 Functions

Management interface

Port configuration

Console, web browser,
SNMP v1, v2c & v3
Port enable/disable;
Auto-negotiation;
10/100/1000Mbps full and
half duplex mode selection;
Flow Control enable/disable;
Bandwidth control on each
port
Tx/Rx/both: 1 to 1 monitoring
IEEE 802.1g tagged-based
VLAN; port-based VLAN;
Q-in-Q tunneling
IEEE802.3as LACP/static trunk:
Supports 24 groups of 16-port
trunks

Port mirroring
VLAN

Link aggregation

Layer 2 Functions (cont.)

Quality of Service (QoS)

Multicasting / IGMP

SNMP MIBs

802.1p, DiffServ, TOS,
port-based; Mac-based
IGMP (v1/v2) snooping

RFC 791 IP; RFC 1122
Internet Host Requirements;
RFC 792 ICMP; RFC 2131 DHCP;
RFC 826 ARP; RFC 1700 Assigned
Numbers; RFC 2822 Internet
Message Format; RFC 793 TCP;
RFC 768UDP; RFC 2236 IGMP v2;
RFC 1157 SNMP; RFC 1349
Type of Service in the IP Suite;
RFC 1945 HTTP/1.0; RFC 932
Subnetwork addressing scheme;
RFC 1350 TFTP; RFC 1510 Network
Authentication; RFC 2068 HTTP

Power

Power Input

100 ~ 240Vac, 50/60Hz

Environmental

Operating temperature

Standard temp unit: -10° ~ +55°C / 14° ~ +131°F
Extended temp unit: -30° ~ +70°C / -22° ~ +158°F

Storage temperature

Operating humidity

Mean Time Between Failure (MTBF)

-30° ~ +70°C / -22° ~ +158°F
0 to 95% non-condensing
>100 000 hours

Mechanical

Dimensions

I x w x d

482.6 x 300 x 44mm / 19 x 11.81 x 1.73"
(1U rack)

Connectors

10/100/1000 Electrical
Fiber
Power

RJ45
SFP (Small Form-factor Pluggable)
IEC⁽¹⁾

LED indicators & Switch

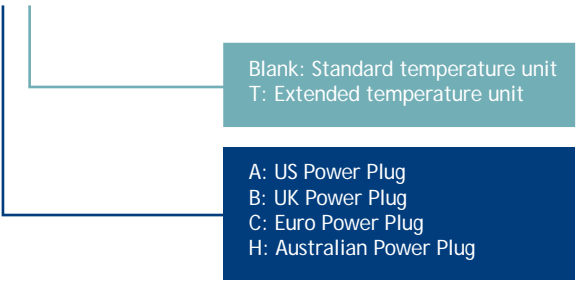
Power

10/100/1000BASE-TX/PoE ports
10/100/1000BASE-T/SFP ports

on / red
10/100 LNK/ACT - green
100 LNK/ACT - green, 1000LNK/ACT - green

Part Number Configurator

ESMGS16-P2-RAT



1. Please select the power plug from US Standard, Euro 2 Circular, UK 3 Pin square or Australian when placing order

Due to ongoing technological improvements, product specifications are subject to change without notice. KBC is not liable for any errors, omissions or changes of any description of the goods contained herein. This information is for the sole purpose of identifying the products, and KBC makes no warranty that the products conform to any description contained herein. Do not rely solely on any representations, statements, or assertions concerning these Products contained herein.