



Product Description

The KBC ESML6-P3 Ethernet series is a managed industrial switch designed for use in a wide range of operating temperatures in non-environmentally conditioned, industrial applications. The switch provides connectivity for up to six 10/100 Mbps twisted pair copper ports and three SFP ports. The SFP ports can be configured as 10/100/1000BASE-T(X) or 1000BASE-SX/LX/LH/ZX LC in any permutation. Redundancy is offered through DT-Ring technology that recovers cable or port failures automatically in less than 50ms. Units can be fully managed through a number of different interfaces and provide a vast range of hardware and software features ensuring ease of installation and enhancement of network performance.

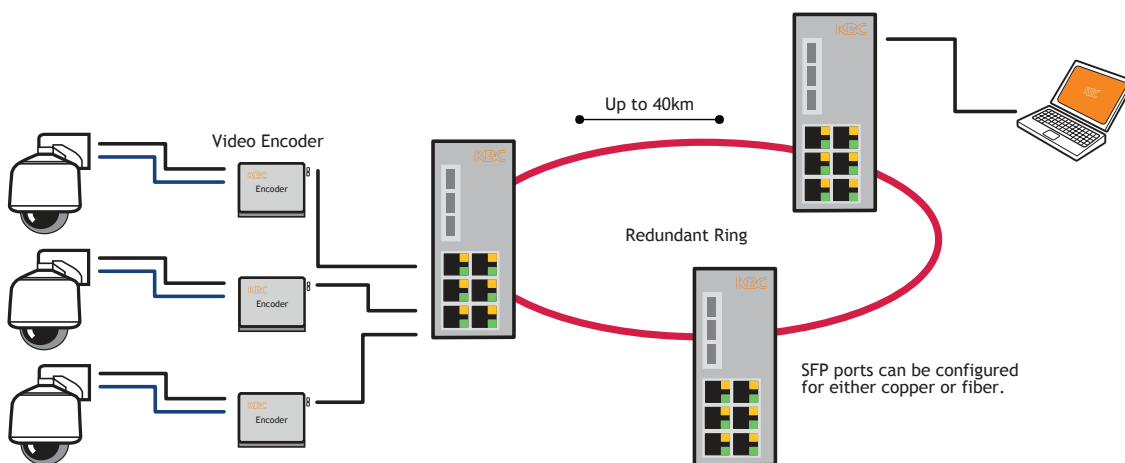
The series is available in either DIN rail or wall-mount configurations.



Product Features

- Supports DT-Ring recovery, <50ms
- Supports Ring, Link, and Star Topologies
- Redundant power input
- Alarm output for power supply
- Port status indicators
- Supports QoS, VLAN, SNMP, MIB V1/V2/V3, IGMP snooping, port mirroring, port trunking, static MAC address binding
- Broadcast storm control
- IP40 protection class

Typical System Configuration



Specifications

Standards

| | |
|---------------|--|
| IEEE Standard | IEEE 802.3 10BASE-T IEEE 802.3u 100BASE-TX & 100BASE-FX IEEE 802.3x Full Duplex IEEE 802.3z Gigabit Fiber IEEE 802.1AB IEEE 802.1d Spanning Tree IEEE 802.1w Rapid spanning tree IEEE 802.1p Class of Service IEEE 802.1q VLAN Tagging IEEE 802.1x PNAC |
|---------------|--|

Switch Performance

| | |
|---------------------------|---|
| Switching Method | Store & Forward |
| Transfer Rate | 148,810 pps Fast Ethernet Port 1488100 pps Gigabit Ethernet Port |
| Backplane Switch Capacity | 7.2 Gbps |
| Mac Address Table | 8k |
| No. of VLAN | 4094 |
| No. of Priority Queues | 8 |

Contact Closure Alarm Output

| | |
|---------------|---------------------------|
| Output | SPST Relay, Normally Open |
| Switch Rating | 120mA @ 350 Vdc |

Power

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|-----------------------------|---------------------------------------|
| Power Input | 18 - 36 Vdc Dual Redundant |
| Power Supply ⁽¹⁾ | Input: 100-240 Vac Output: +24 Vdc |
| Power Consumption | <5.6W |

Mechanical

| | |
|------------------------|---|
| Casing | IP40 Protection |
| Dimensions (W x H x D) | 75mm x 140mm x 123mm (2.95" x 5.51" x 4.84") |
| Weight | 1200g |
| Installation | Wall-mount or DIN Rail |

Environmental

| | |
|----------------------------------|------------------------------|
| Operating Temperature | -40° ~ +85°C / -40° ~ +185°F |
| Storage Temperature | -40° ~ +85°C / -40° ~ +185°F |
| Operating Humidity | 0 to 95% non-condensing |
| Mean Time Between Failure (MTBF) | >300,000 Hours |

Connectors

| | |
|-----------------------|---|
| 10/100 Electrical | 6 x RJ45 |
| Contact Closure Alarm | 2-way Screw block terminal |
| Console | 1 x RJ45 |
| Power ⁽²⁾ | 3-way Screw block terminal (dual redundant) |

Approvals

| | |
|---|--|
| IEC61000-4-2(ESD) | ±8kV Contact discharge, ±15kV Air discharge |
| IEC61000-4-3(RS) | 10V/m (80-1000 MHz) |
| IEC61000-4-4(EFT) | Power line ±4kV, Data line ±2kV |
| IEC61000-4-5(Surge) | Power line ±4kV CM/±4kV DM Data line ±2kV |
| IEC61000-4-6(CS) | 3V (10 kHz-150 kHz) 10V (150 kHz-80 MHz) |
| IEC61000-4-8 100A/m cont. (Power Frequency Magnetic Field) | 1000A/m, 1s to 3s 2.5kV CM, 1kV DM |
| IEC61000-4-12/18 (Damped Oscillatory Wave) | |
| IEC61000-4-10 (Damped Oscillatory) | 30A/m |
| IEC61000-4-16 (Common Mode Conduct) | 30V cont. 300V, 1s |
| FCC CFR47 Part 15/EN55022 | Class A |
| IEC61000-6-2 (Industrial Standards) | |
| IEC61850-3 (Substations) | |
| IEEE1613 (Electric Power Substations) | |
| EN50121-4 (Railway Applications) | |
| Mine Safety CertificationEN50121-4 (Railway Applications) | |

Part Number Configurator

ESML6-P3-DA

D: DIN Rail
W: Wall-Mount

A: US Power Plug
B: UK Power Plug
C: Euro Power Plug
E: Australian Power Plug

1. Please select the power plug from US Standard, Euro 2 Circular, UK 3 Pin square or Australian when placing order.
2. Power lines are crimped and fitted to screw block connector in factory.

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