

IES-1160

➤ Industrial 16-port unmanaged Ethernet switch with 16x10/100Base-T(X)

Features

- RJ-45 port support Auto MDI/MDI-X switching function
- Provides Store-and-Forward switching architecture
- Provides 3.2Gbps Back-plane (Switching Fabric)
- Warning system by relay output
- Rigid IP-30 housing design
- DIN-Rail and wall mounting enabled

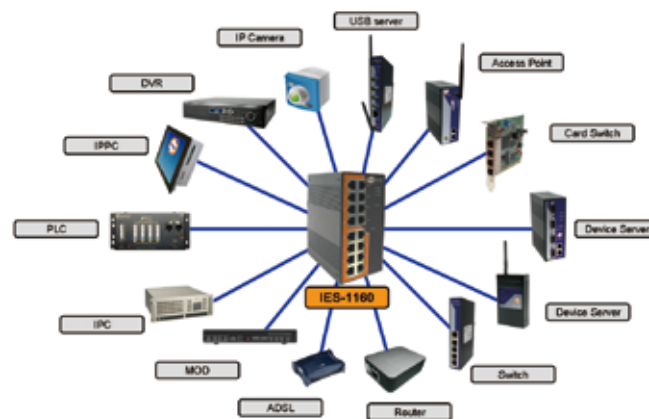


Introduction

IES-1160 is unmanaged Ethernet switch with 16x10/100Base-T(X) port. IES-1160 support redundant power inputs, relay output alarm, and surge protection. The wide operating temperature range from -40°C to 70°C can satisfy most of operating environments. Especially, IES-1160 features dual different redundant DC power inputs, two DC power inputs are on terminal block to avoid any unexpected fails on power on. Thus, IES-1160 could guarantee a non-stop operation. Therefore, the switch is one of the most reliable choice for highly-unmanaged Ethernet application.

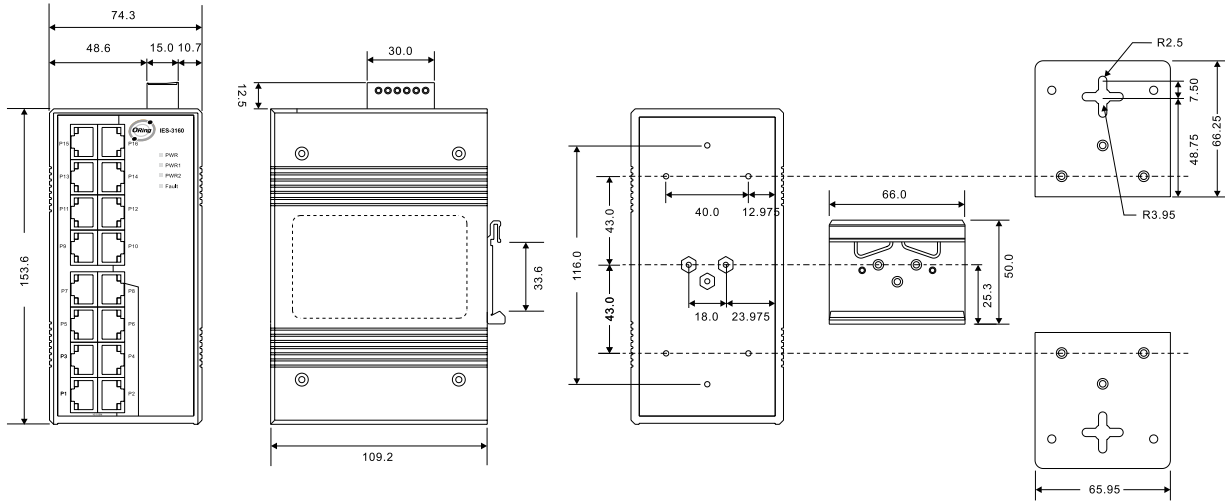
Practical Operation

IES-1160 is usually deployed for connecting several Ethernet devices, such like Ethernet I/O, IP-Camera, etc. The designs of rugged housing and wide operating temperature, range form $-40 \sim 70^{\circ}\text{C}$, makes IES-1160 reliably in any kinds of industrial applications.



Connections of Ethernet devices

Dimension



(Unit=mm)

Specifications

| ORing Switch Model | IES-1160 |
|---|--|
| Physical Ports | |
| 10/100 Base-T(X) Ports in RJ45 Auto MDI/MDIX | 16 |
| Technology | |
| Ethernet Standards | IEEE 802.3 for 10Base-T, IEEE 802.3u for 100Base-T(X) IEEE 802.3x for Flow control |
| MAC Table | 8192 MAC addresses |
| Priority Queues | 4 |
| Processing | Store-and-Forward |
| Switch Properties | Switching latency: 9 us Switching bandwidth: 3.2Gbps |
| LED Indicators | |
| Power Indicator | Green : Power LED x 3 |
| Fault Indicator | Amber : Indicate power failed warning |
| 10/100Base-T(X) RJ45 Port Indicator | Green for port Link/Act. Amber for Duplex/Collision |
| Fault Contact | |
| Relay | Relay output to carry capacity of 1A at 24VDC |
| Power | |
| Redundant Input Power | Dual DC inputs. 12 ~ 48VDC on 6-pin terminal block |
| Power Consumption (Typ.) | 9 Watts |
| Overload Current Protection | Present |
| Reverse Polarity Protection | Present on terminal block |

| Physical Characteristic | |
|-------------------------|--|
| Enclosure | IP-30 |
| Dimension (W x D x H) | 74.3(W)x109.2(D)x153.6(H) mm (2.93 x 4.3 x 6.05 inch) |
| Weight (g) | 1060 g |
| Environmental | |
| Storage Temperature | -40 to 85°C (-40 to 185°F) |
| Operating Temperature | -40 to 70°C (-40 to 158°F) |
| Operating Humidity | 5% to 95% Non-condensing |
| Regulatory approvals | |
| EMI | FCC Part 15, CISPR (EN55022) class A |
| EMS | EN61000-4-2 (ESD), EN61000-4-3 (RS), EN61000-4-4 (EFT), EN61000-4-5 (Surge), EN61000-4-6 (CS), EN61000-4-8, EN61000-4-11 |
| Shock | IEC60068-2-27 |
| Free Fall | IEC60068-2-32 |
| Vibration | IEC60068-2-6 |
| Safety | EN60950-1 |
| Warranty | 5 years |

Ordering Information

IES-1 **AA** **B**

| Code Definition | 10/100Base-T(X) Port Number | Additional Port Number |
|-----------------|-----------------------------|------------------------|
| Option | - 16 : 16 ports | - 0 : 0 ports |

| Available Model | Model Name | Description |
|--|------------|---|
| | IES-1160 | Industrial 16-port unmanaged Ethernet switch with 16x10/100Base-T(X) |
| Packing List | | Optional Accessories (Can be purchased separately) P7-2 |
| <ul style="list-style-type: none"> IES-1160 x 1 Quick Installation Guide x 1 DIN-Rail Kit x 1 Wall-mount Kit x 1 | | <ul style="list-style-type: none"> DR-45 series : 45 Watts DIN-Rail power supply DR-75 series : 75 Watts DIN-Rail power supply DR-120 series : 120 Watts DIN-Rail power supply |