



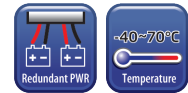
IES-1160

IES-1160

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

Features

- RJ-45 ports 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

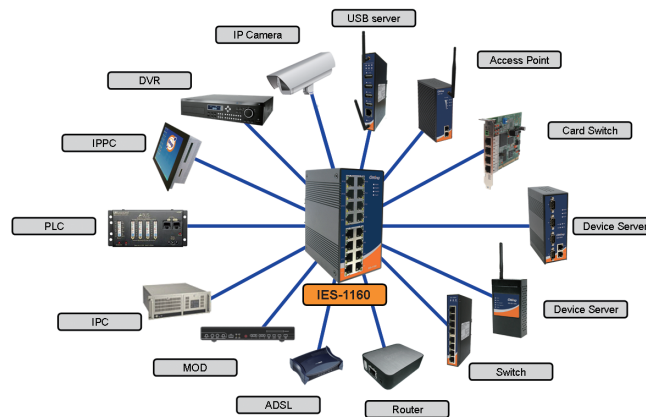


Introduction

IES-1160 is the 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.

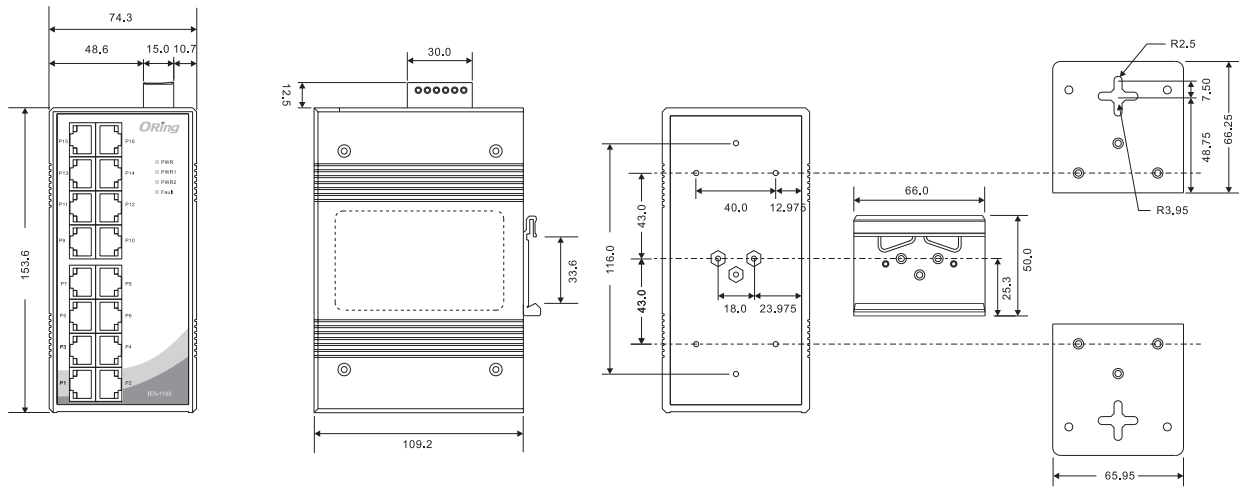
Practical Operation

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 from -40 ~ 70°C, makes IES-1160 reliably in any kinds of industrial applications.



Connections of Ethernet devices

Dimensions



(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-TX IEEE 802.3x for Flow control
MAC Table	8192 MAC addresses
Priority Queues	4
Processing	Store-and-Forward
Switch Properties	Switching latency: 9 μs Switching bandwidth: 3.2Gbps
LED Indicators	
Power Indicator	Green : Power LED x 3
Fault Indicator	Amber : Indicates power failure occurred
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

Industrial Ethernet Switch

Industrial Media Converter

Industrial Device Server

Industrial Wireless Access Point

Industrial Cellular VPN Router

Industrial M2M Gateway

Accessories

Network Management Software

Physical Characteristics	
Enclosure	IP-30
Dimensions (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
MTBF (Hours) (MIL-HDBK-217F2, GB, GC, 25°C)	267,635
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)

<p>Packing List</p> <ul style="list-style-type: none"> • IES-1160 • DIN-Rail Kit • Wall-mount Kit • Quick Installation Guide 	<p>Optional Accessories (Can be purchased separately)</p> <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 • SDR-240-48, 240W DIN-Rail power supply • SDR-480-48, 480W DIN-Rail power supply
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