



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



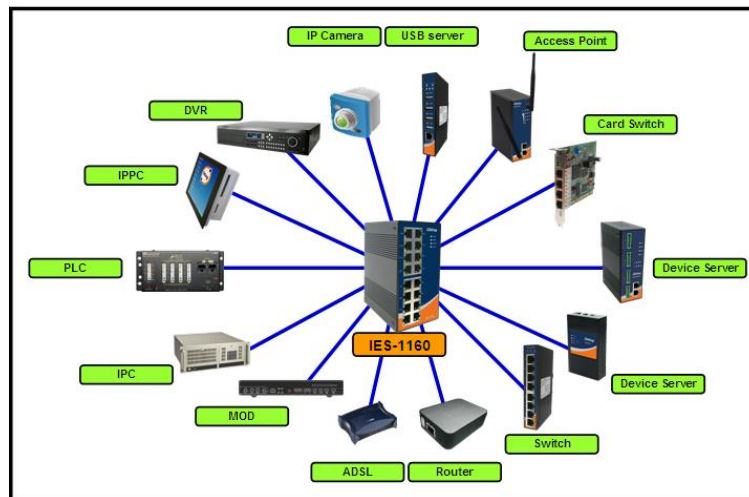
Introduction

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 75°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 choices for highly-unmanaged Ethernet application.



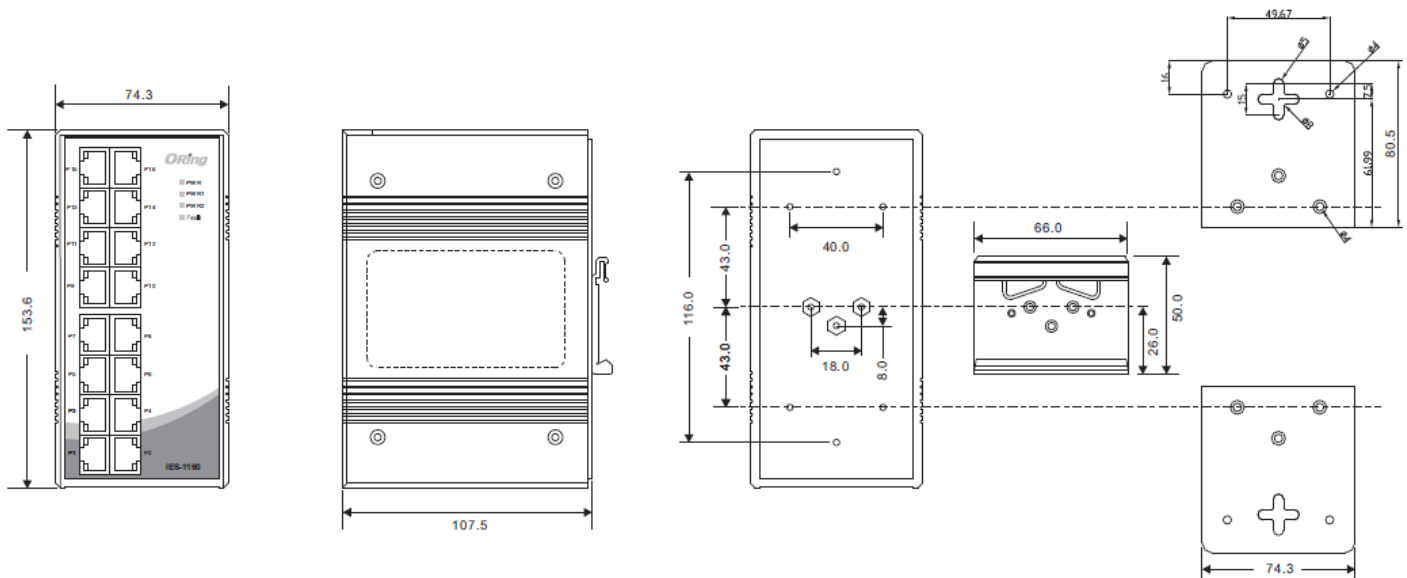
Practical Operation

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 ~ 75 °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-TX IEEE 802.3x for Flow control
MAC Table	8192 MAC addresses
Priority Queues	4
Processing	Store-and-Forward
Switch Properties	Switching latency <96us Switching bandwidth: 3.2Gbps
Packet Buffer size	1M bits
LED Indicators	

Power Indicator	Green : Power LED x 3
Fault Indicator	Amber : Indicate power failed warning
10/100Base-T(X) RJ45 Port Indicator	Upper for link/Act indicator, Green for port Link/Act. Lower for duplex/Collision indicator, Amber for Full duplex, OFF for half duplex, blink for 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.)	15Watts,12-48VDC/1.2A~0.3A
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)x107.5(D)x153.6(H) mm (2.93 x 4.23 x 6.05 inch)
Weight (g)	1060 g
Environmental	
Storage Temperature	-40 to 85°C (-40 to 185°F)
Operating Temperature	-40 to 75°C (-40 to 167°F)
Operating Humidity	5% to 95% Non-condensing
Regulatory approvals	
EMC	CE EMC (EN 55035, EN 55032), FCC Part 15B
EMI	EN 55032, CISPR32, EN 61000-3-2, EN 61000-3-3, FCC Part 15, class A
EMS	EN 55035 (IEC/EN 61000-4-2 (ESD), IEC/EN 61000-4-3 (RS), IEC/EN 61000-4-4 (EFT), IEC/EN 61000-4-5 (Surge), IEC/EN 61000-4-6 (CS), IEC/EN 61000-4-8(PFMIF)
Shock	IEC 60068-2-27
Free Fall	IEC 60068-2-31
Vibration	IEC 60068-2-6
Safety	EN 62368-1, UL 61010-1, UL61010-2-201
MTBF	1,160,204 hrs
Warranty	5 years

Ordering Information

IES-1AAB

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

- IES-1160 x 1
- Wall-mount Kit x 1
- Quick Installation Guide x 1
- DIN-Rail Kit x 1

Optional Accessories

- DR/SDR/DRP Series DIN-Rail power supply.