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











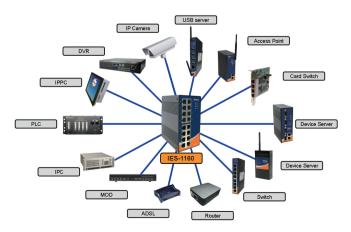


Introduction

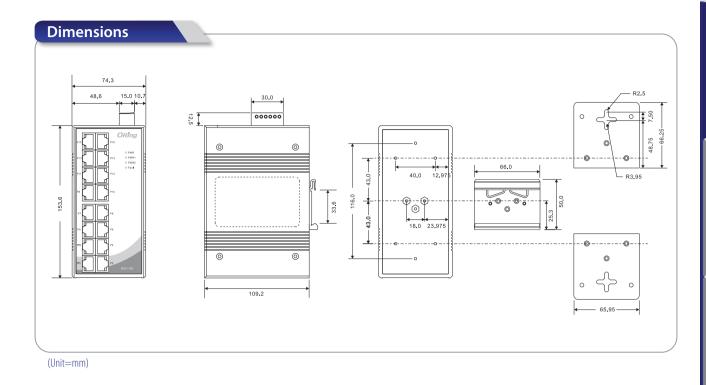
IES-1160 is the unmanaged Ethernet switch with 16x10/100Base-T(X) port. IES-1160 support redundant power inputs, relay output alarm, and surge protection. The wide operating temperature range from -40°C to 70°C can satisfy most of operating environments. Especially, IES-1160 features dual different redundant 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 $-40 \sim 70^{\circ}$ C, makes IES-1160 reliably in any kinds of industrial applications.



Connections of Ethernet devices



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		

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 AAB

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 • DIN-Rail Kit • Wall-mount Kit • Quick Installation Guide		Optional Accessories (Can be purchased separately) • 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