

# **IES-0016**

## 16 10/100TX Industrial Unmanaged Ethernet Switch

- Dual 9V~36VDC input compliant with ISO 7637-2
- Galvanic isolation protection (power input /Ethernet port to system; power input to Ethernet port)
- Relay alarm output for power fail and alarm
- E-marking certificate for vehicle application (-24V model)













### **OVERVIEW**

Lantech IES-0016 is a high performance 16 10/100TX industrial Ethernet switch.

#### Galvanic isolation for dual 24V wide input range

The IES-0016-24V accepts power input 9~36VDC and is compliant with ISO 7637-2 which protects switch from being damaged by high voltage that could be found at vehicle cranky start

# E-marking certificate (-24V model), High reliability and extended working temperature

Lantech IES-0016 provides ±2000V EFT and ±6000V ESD protection, which can reduce unstable situation caused by

power line and Ethernet. It has high reliability and robustness coping with extensive EMI/RFI phenomenon, environmental vibration and shocks usually found in Automation, transportation, Wireless backhaul, Semi-conductor factory and assembly lines.

The -E model can be used in extreme environments with an operating temperature range of -40°C to 75°C.

The E-marking certificate makes it the most suitable switch for bus, carriage, other vehicles application as well as for industrial areas. (-24V model)

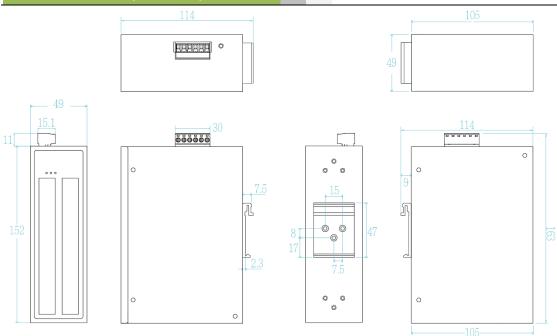
### **FEATURES & BENEFITS**

- 16 10/100TX industrial Ethernet switch (Total 16 Ports Switch)
- Dual 9V~36VDC power input with ISO7637-2 compliance
- Back-plane (Switching Fabric): 3.2Gbps
- Provides EFT protection ±2000 VDC for power line
- Supports ±6000 VDC Ethernet ESD protection
- Galvanic isolation between power input and

- system/case ground; between Ethernet port and system/case ground; between power input and Ethernet port
- E-marking certificate for vehicle application (-24V model)
- Relay alarm output for power fail and alarm
- IP30 metal housing with DIN rail and Wall-mount\*\* design



# **DIMENSIONS** (unit=mm)



# **SPECIFICATION**

Hardware Specification		Power Supply	9V~36VDC
Standards	IEEE802.3 10Base-T Ethernet	Power Consumption	4.5W
	IEEE802.3x Flow Control and Back Pressure	Galvanic Isolation	Between power input and system/case ground
Switch Architecture	Back-plane (Switching Fabric): 3.2Gbps		Between Ethernet port and system/case ground
Transfer Rate	14,880pps for Ethernet port		Between power input and Ethernet port
	148,800pps for Fast Ethernet port	Case Dimension	Metal case IP-30
Mac Address	16K MAC address table		49 (W) x 105 (D) x 152 (H) mm
Connectors	10/100TX: 16 x ports RJ-45 with Auto MDI/MDI-X	Weight	900g
	function	Installation	DIN Rail and Wall Mount** Design
	Power & P-Fail connector: 1 x 6-pole terminal block	Relay Alarm	Provides one relay output for power fail and alarm.
Network Cable	10Base-T: 2-pair UTP/STP Cat. 3, 4, 5/ 5E/ 6 cable		Alarm Relay current carry ability: 1A @ DC24V
	EIA/TIA-568 100-ohm (100m)	EMI & EMS	FCC Class A, CE EN55011,
	100Base-TX: 2-pair UTP/STP Cat. 5/ 5E/ 6 cable		CE EN55032, CE EN55024,
	EIA/TIA-568 100-ohm (100m)		CE EN61000-4-2, CE EN61000-4-3,
LED	Per unit: Power 1 (Green), Power 2 (Green), P-Fail		CE EN61000-4-4, CE EN61000-4-5,
	(Red);		CE EN61000-4-6, CE EN61000-4-8,
	Ethernet port: Link/Activity (Green)		CE EN61000-6-2, CE EN61000-6-4
Operating Humidity	5% ~ 95% (Non-condensing)	Vehicle certificate	E-Marking with E13 granted approval (-24V model)
Operating	-20°C~60°C / -4°F~140°F (Standard model)	MTBF	1,950,865hrs (standards: IEC 62380)
Temperature	-40°C~75°C / -40°F~167°F(-E model)	Warranty	5 years
Storage	-40°C~85°C / -40°F~185°F		*Future Release
Temperature			**Optional

### **ORDERING INFORMATION**

■ IES-0016-24V......P/N: 8351-116

 $16\ 10/100TX\ Industrial\ Ethernet\ Switch,\ dual\ 9V\sim36VDC\ input;\ compliant\ with\ ISO7637-2;\ -20^{\circ}C\ to\ 60^{\circ}C$ 

■ IES-0016-24V-E......P/N: 8351-117

 $16\ 10/100TX\ Industrial\ Ethernet\ Switch,\ dual\ 9V\sim36VDC\ input,\ compliant\ with\ ISO7637-2;\ -40^{\circ}C\ to\ 75^{\circ}C$ 

All part no. with WALL are models with wall mount kit instead of DIN Rail



## **OPTIONAL ACCESSORIES**

#### **DIN Rail Power**

■ MDR-40 Series 40W Single Output Industrial Din Rail Power; 85-264VAC / 120-370VDC Input Range; Cooling by free air convection; RoHS2;

Operating Temp. -20°C~70°C (ambient, derating each output at 4% per degree from  $60^{\circ}$ C ~  $70^{\circ}$ C)

■ MDR-20 Series 20W Single Output Industrial Din Rail Power; 85-264VAC / 120-370VDC Input Range; Cooling by free air convection; RoHS2;

Operating Temp. -20°C~70°C (ambient, derating each output at 2.5% per degree from 50°C ~ 70°C)

#### Lantech Communications Global Inc.

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