TES-0008D

8 FE M12 Unmanagement Ethernet Switch

- *Dual power inputs 9~36V (24VI model)*
- *Wide Operating Temperature from -40℃ to 70℃*
- *IP54 Aluminum housing for best heat dissipation and preventing moist ingress*
- *Galvanic isolation between power input and Ethernet power system*
- *E-marking certificate for vehicle application (24VI model)*
- *ITxPT** labeled w/ ignition function (24VI-IGN model)*

OVERVIEW

Lantech TES-0008D is a compact 8 10/100TX unmanaged Ethernet switch with M12 connectors with IP54-rated protection which meets the high-reliability requirements demanded by industrial rolling stock applications. It is designed for Ethernet switch systems in rail, metro, vehicle, or hardened industrial applications with a 24V input.

Galvanic isolation for dual 24VI input

Galvanic isolation protection between power input and Ethernet port to case ground and it accepts dual power input 9~36VDC.

Ignition off mode and sleep mode; ITxPT** labeled

The IES-0008C Ignition model with a 60-minute countdown of standby mode to continue network operation and then into sleep mode to avoid the switch rebooting when ignition is back. The ignition model is labeled with ITxPT** public transport standards.

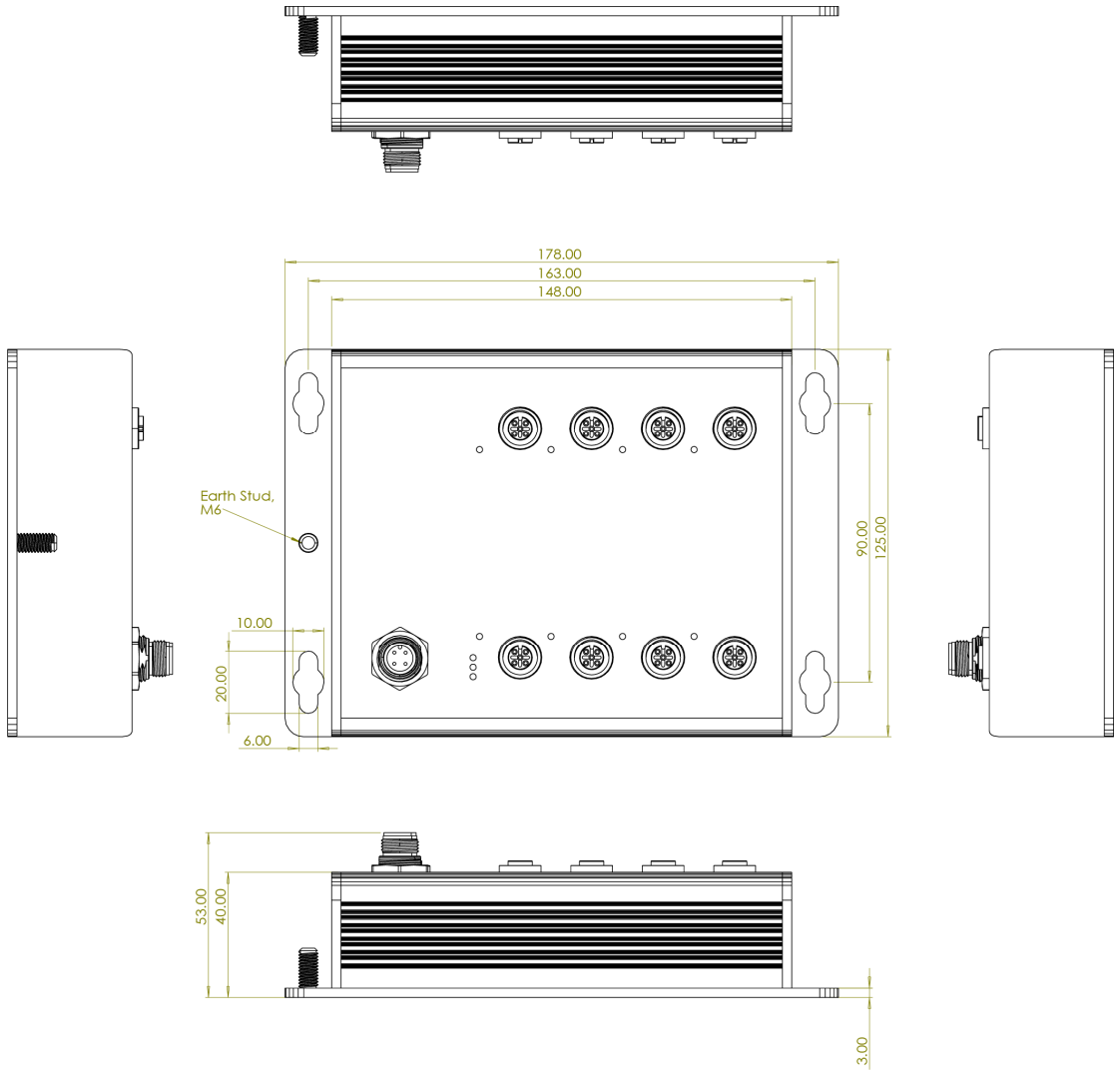
E-marking certificate, ISO 7637-2 compliant, high reliability with Ethernet isolation and polarity reversal protection design and extended working temperature

The switch is designed with dual power inputs and is capable of withstanding EMI/RFI interference in the onboard or industrial harden network. The redundant power input design integrates inrush current protection also protects against polarity reversal. Additionally, the galvanic isolation feature shields the system from power transients often present in onboard and outdoor networks. It also meets the requirements of ISO 16750-2 P5A, reducing the impact of high-frequency pulse voltage that could be incurred by motor applications. The switch can be used in extreme environments with an operating temperature range of -40°C to 70°C. The E-marking certificate makes it the most suitable for bus, carriage, and other vehicle applications.

FEATURES & BENEFITS

- **8 10/100TX Unmanaged Ethernet Switch with M12 connectors and IP54 rated protection**
- **Dual 9V~36VDC power input for 24VI model with ISO7637-2/pulse 5A compliance**
- **Back-plane (Switching Fabric): 1.6 Gbps**
- **2K MAC address table**
- **Wide Operating Temperature (-40°C ~70°C) (-E model)**
- **Wall mount design**
- **Auto power-saving mode**
- **E-marking & ITxPT** certificate for vehicle application**
- **Ignition model with 60min count-down to standby mode (24VI-IGN model)**

DIMENSIONS (unit=mm)



SPECIFICATIONS

Hardware Specification

IEEE Standard	IEEE802.3 10BASE-T Ethernet IEEE802.3u 100BASE-T Ethernet IEEE802.3x Flow Control and Back Pressure IEEE802.3az Energy-Efficient Ethernet (EEE) for reduced power consumption during low traffic conditions
Transfer Rate	14,880pps for Ethernet port 148,800pps for Fast Ethernet port
Mac Address	2K MAC address table
Connector	10/100TX: 8 x M12, 4-pole D-coded, Female with auto MDI/MDI-X function Power connector: 1 x M12, 4-pole A coded, Male
LED	Per unit: Power 1 (Green), Power 2 (Green), Ethernet: Link/Activity (Green)
Power Supply	Dual input 9~36VDC (24VI model)
Power Consumption	3W

Operating Humidity	5% to 95% (Non-condensing)
Operating Temperature	-20˚C ~ 60˚C (-4˚F ~ 140˚F) -40˚C ~ 70˚C (-40˚F ~ 158˚F) (-E model)
Storage Temperature	-40˚C ~ 85˚C (-40˚F ~ 185˚F)
Galvanic Isolation	Between power input and case ground Between the Ethernet port and case ground Between power input and Ethernet port
Case Dimension	Aluminum case, 178mm(W)x125mm(H)x53mm(D) (IP54 model)
Weight	700g
Installation	Wall Mount Design
EMC	FCC Class A, CE EN55011, CE EN61000-4-2 (ESD), CE EN61000-4-3 (RS), CE EN61000-4-4 (EFT), CE EN61000-4-5 (Surge), CE EN61000-4-6 (CS), CE EN61000-4-8 (Magnetic Field), CE EN61000-6-2,

	CE EN61000-6-4, CE EN55032, CE EN55024 BS EN61000-4-2, BS EN61000-4-3, BS EN61000-4-4, BS EN61000-4-5, BS EN61000-4-6, BS EN61000-4-8,

	BS EN55032, BS EN55024
Vehicle certificate	E24 marking (UN ECE R10) ITxPT labeled**
MTBF	1,058,248 (IEEE 62830 standards)
Warranty	5 years

*future release

**Optional

ORDERING INFORMATION

All model packages include M12 caps and wall mount bracket. All standard models are non-coating, optional coating models are available with –C model name.

- **TES-0008D-54-24VI-E…..……...…….....P/N: 8351-154**
  8 10/100TX IP54 rated unmanaged Ethernet Switch w/M12 connectors w/Ethernet galvanic isolation; 9~36VDC dual power inputs; -40°C to 70°C
- **TES-0008D-54-24VI…..……...…….....P/N: 8351-1541**
  8 10/100TX IP54 rated unmanaged Ethernet Switch w/M12 connectors w/Ethernet galvanic isolation; 9~36VDC dual power inputs; -20°C to 60°C
- **TES-0008D-54-24VI-E-IGN…..……...…….....P/N: 8351-1542**
  8 10/100TX IP54 rated unmanaged Ethernet Switch w/M12 connectors w/Ethernet galvanic isolation; 9~36VDC dual power inputs; -40°C to 70°C w/ignition
- **TES-0008D-54-24VI-IGN…..……...…….....P/N: 8351-1543**
  8 10/100TX IP54 rated unmanaged Ethernet Switch w/M12 connectors w/Ethernet galvanic isolation; 9~36VDC dual power inputs; -20°C to 60°C w/ignition

OPTIONAL ACCESSORIES

M12 Connector & Cable

Connector

- **ECONM12-04A(F)-C-180** — 4 pin M12 (Female) A-coded 180 degree crimp type connector for power supply

Cable

- **ECONM12-4P(F)1.5M CABLE** — 4 pin M12 (Female) A-coded 90 degree cable for power supply, 150cm

Lantech Communications Global Inc.

www.lantechcom.tw
info@lantechcom.tw