TES-0008D

8 FE EN50155 M12 Unmanaged Ethernet Switch



OVERVIEW

Lantech TES-0008D is a compact unmanaged Ethernet switch featuring 8 × 10/100TX ports with M12 connectors and an IP54/IP67-rated enclosure for enhanced durability and secure connections. Designed to meet the stringent reliability requirements of industrial rolling stock, it is well-suited for vehicle and other rugged industrial applications with 24V power input.

Galvanic isolation for dual 24VI/24TVI input

Galvanic isolation protection between power input and Ethernet port to case ground and it accepts dual power input 9~36VDC and 24TVI model accepts 16.8~56VDC.

E-marking certificate, ISO 7637-2 compliant, EN50155 verification, high reliability with Ethernet isolation and polarity reversal protection design and extended working temperature; ISO 16750-2 P5A compliant

TES-0008D is designed with dual power inputs and can withstand EMI/RFI interference in onboard and industrial networks. The redundant power input design integrates inrush current protection and safeguards against polarity reversal. In addition, the galvanic isolation feature shields the system from power transients commonly found in onboard and outdoor environments.

Compliant with ISO 16750-2 P5A (24V system DC 174V/8Ω/350ms), it effectively reduces the impact of high-frequency pulse voltage generated by motor applications. With an extended operating temperature range of -40°C to 70°C, TES-0008D is suitable for deployment in extreme environments. The E-marking certificate further ensures its reliability for buses, carriages, and other vehicle applications.

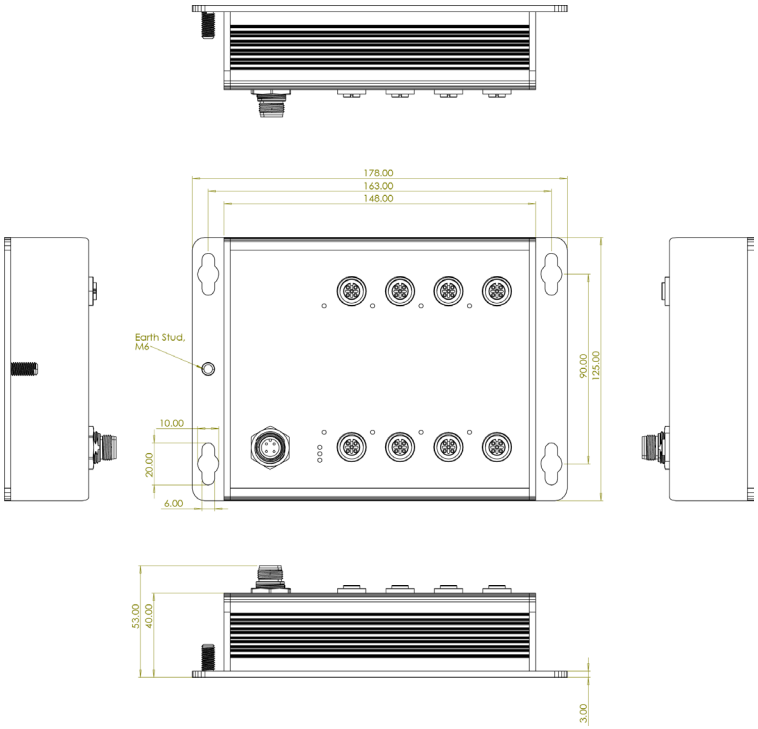
OPTIONAL FEATURE

Sleep Mode & efficient timer under Ignition-Off State

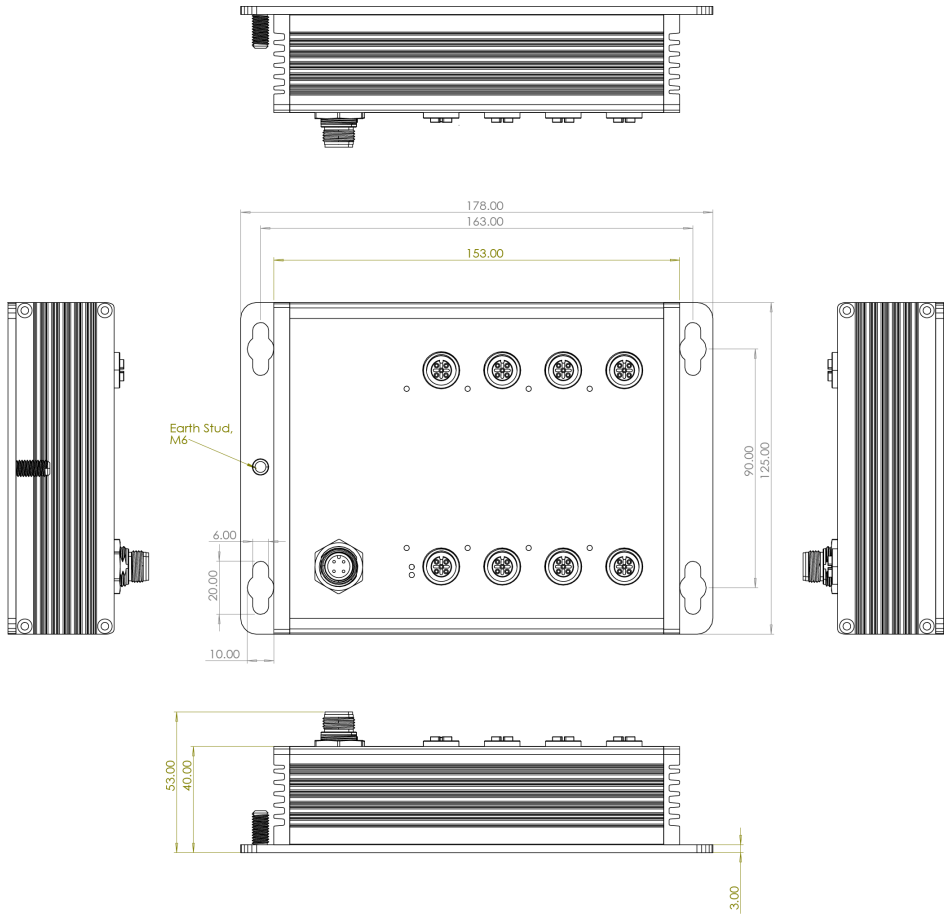
Compliant with ITxPT standards, the -IGN model features a 60-minute standby mode after ignition-off, maintaining network operation before entering sleep mode (0.048W)—preventing unnecessary reboots when power is restored.

DIMENSIONS (unit=mm)

IP54 models:



IP67 models:



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) 16.8~56VDC (24TVI 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 ports and case ground Between power input and Ethernet port
Case Dimension	Aluminum case, 178mm(W)x125mm(H)x53mm(D) (IP54/IP67 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
Rail & Vehicle certificate	E24 marking (UN ECE R10), R118 ITxPT labeled EN 50155:2021, EN 50121-4:2016/A1:2019,

	EN 50121-3-2:2016/A1:2019, EN 50124-1:2017, EN 45545-1, EN 45545-2 Fire & Smoke verification

MTBF	1,058,248 (IEEE 62830 standards)

*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-IGN-E…….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
- **TES-0008D-54-24TVI…….P/N: 8351-1544**
  8 10/100TX IP54 rated EN50155 unmanaged Ethernet Switch w/M12 connectors w/Ethernet galvanic isolation; 16.8~56VDC dual power inputs; -40°C to 70°C
- **TES-0008D-67-24VI-E…….. P/N: 8351-15401**
  8 10/100TX IP67 rated unmanaged Ethernet Switch w/M12 connectors w/Ethernet galvanic isolation; 9~36VDC dual power inputs; -40°C to 70°C
- **TES-0008D-67-24VI-IGN-E…….P/N: 8351-15402**
  8 10/100TX IP67 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-67-24VI-IGN…….P/N: 8351-15403**
  8 10/100TX IP67 rated unmanaged Ethernet Switch w/M12 connectors w/Ethernet galvanic isolation; 9~36VDC dual power inputs; -20°C to 60°C w/ignition
- **TES-0008D-67-24TVI…….P/N: 8351-15404**
  8 10/100TX IP67 rated EN50155 unmanaged Ethernet Switch w/M12 connectors w/Ethernet galvanic isolation; 16.8~56VDC dual power inputs; -40°C to 70°C

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

© 2026 Copyright Lantech Communications Global Inc. All rights reserved. Updated on 17 SPE 2026
The revised authority rights of product specifications belong to Lantech Communications Global Inc.
In a continuing effort to improve and advance technology, product specifications are subject to change without notice.