

# T(P)GS-0008CA

## 8 10/100/1000T (PoE at/af) EN50155 Ethernet Switch

- IEEE802.3at/af up to 30W PoE output (for PoE model)
- Dual power inputs 16.8~137.5V (WV model) or 9~36V (24V model) or 16.8~56V (24TV model)
- Wide Operating Temperature from -40°C to 75°C
- IP54/IP41 Aluminum housing for best heat dissipation and preventing moist ingress
- EN50155/50121-3-2/50121-4 and EN45545-2 Fire & Smoke verification
- E-marking certificate for vehicle application (24V model)
- ITxPT labeled w/ ignition function (24V-IGN model)



## OVERVIEW

Lantech T(P)GS-0008CA is an 8 10/100/1000 Base-T with M12-connectors EN50155 unmanaged Ethernet switch with IP54/IP41 rated protection which meets the high reliability requirements demanded by industrial rolling stock applications.

### **E-marking certificate, ITxPT; ISO 7637-2 compliant and extended working temperature**

The T(P)GS-0008CA is designed to meet with critical network environment with IP54 enclosure and M12 connectors for protection against dust and water. It has passed harsh environmental testing to comply with Industrial EMI and Safety standards as well as stability testing such as Free fall, Shock,

and vibration. It is labeled with ITxPT public transport standards and also compliant with ISO 7637-2 which protects switch from being damaged by high voltage that could be found at vehicle cranky start.

For a greater flexibility in application the T(P)GS-0008CA supports an extended operating temperature range from -40°C to 75°C.

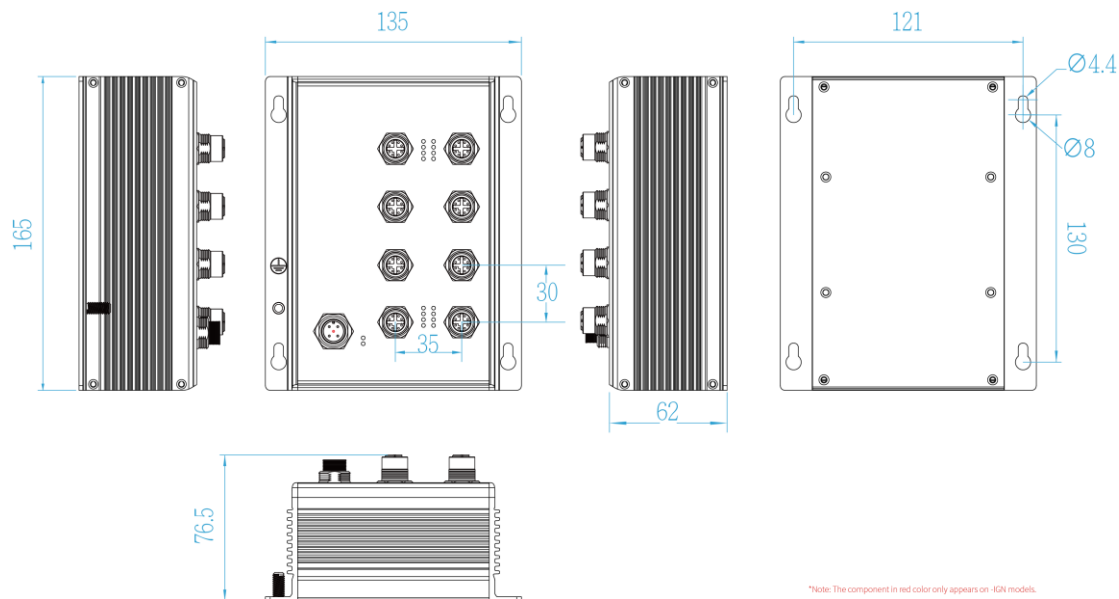
The E-marking certificate makes it the most suitable switch for bus, carriage, other vehicles application as well as for industrial areas where the power source is limited with 12V or 24V but has demand of IP surveillance or VoIP applications.

## FEATURES & BENEFITS

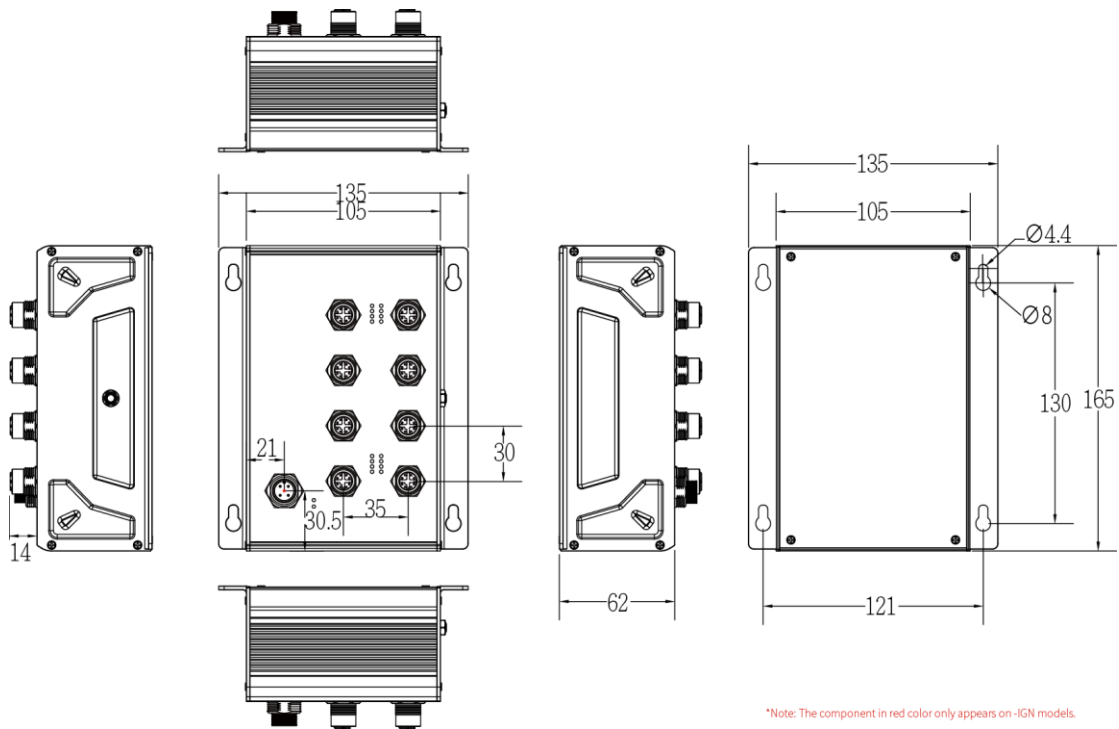
- 8 10/100/1000T EN50155 Unmanaged Ethernet Switch with M12 connectors and IP54 rated protection
- Supports IEEE802.3at/af feeding power up to 30W per PoE port (For PoE Model)
- Back-plane (Switching Fabric): 16 Gbps
- 8K MAC address table
- Wide Operating Temperature (-40°C ~75°C)
- Din rail\*\* and wall mount design
- E-marking certificate for vehicle application (24V model)
- EN50155/50121-3-2/50121-4 and EN45545-2 Fire & Smoke verification
- ITxPT labeled w/ ignition function (24V-IGN model)

**DIMENSIONS (unit=mm)**

**IP54 model**

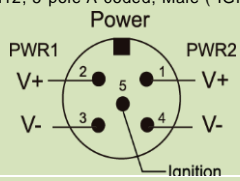



**IP41 model**



**SPECIFICATIONS**

Hardware Specification		Transfer Rate	14,880pps for Ethernet port 148,800pps for Fast Ethernet port
IEEE Standard	IEEE802.3 10BASE-T Ethernet	Mac Address	8K MAC address table
	IEEE802.3u 100BASE-T Ethernet	Connector	10/100/1000T: 8 x M12, 8-pole X-coded, Female with auto MDI/MDI-X function Power connector: 1 x M12, 4-pole A coded, Male
	IEEE802.3ab 1000Base-T		
	IEEE802.3x Flow Control and Back Pressure		
	IEEE802.3at/af Power over Ethernet (For PoE Model)		

	1 x M12, 5-pole A-coded, Male (-IGN model) 	Storage Temperature: -40°C ~ 85°C (-40°F ~ 185°F) Case Dimension: Aluminum case, 135mm(W)x165mm(H)x76.5mm(D) (IP54 model), 135mm(W)x165mm(H)x76mm(D) (IP41 model) Weight: 700g Installation: Wall Mount Design
Rotary Switch	Rotary switch for delay time configuration (-24V-IGN model)	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 Stability Testing: EN61373 (Shock and Vibration) Verifications & Report: EN50155/EN50121-3-2/EN50121-4 verification, EN 45545-1, EN 45545-2 Fire & Smoke verification Vehicle certificate: E13 marking (24V model), ITxPT labeled (24V-IGN model) MTBF: 1,245,229 Hrs (IEEE 62830 standards) Warranty: 5 years
LED	Per unit: Power 1 (Green), Power 2 (Green), Ethernet: Link/Activity (Green), PoE: (Green)	
PoE pin assignment	M12 port # 1~ # 8 support IEEE 802.3at/af End-point. Per port provides up to 30W (-6 model: M12 port #1~#6 support IEEE 802.3at/af End-point) 10/100/1000T 	
Power Supply	Dual input 9~36VDC (24V model) 16.8~56VDC (24TV model) 16.8~136.5VDC (WV model)	
Power Consumption	5W without PoE load (24V model) 10W without PoE load (WV model)	
Power Budget	Total 100W @ 24VDC and above Higher PoE budget can be applied upon request. ** <b>Note: This is a non-PoE galvanic isolated model.</b>	
Operating Humidity	5% to 95% (Non-condensing)	
Operating Temperature	-40°C ~ 75°C (-40°F ~ 167°F)	

\*\*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.

- **TPGS-0008CA-54-WV.....P/N: 8351-1253**  
8 10/100/1000T IP54 rated EN50155 PoE at/af unmanaged Ethernet Switch w/M12 connectors; 16.8~137.5VDC dual power inputs; -40°C to 75°C
- **TPGS-0008CA-6-54-WV.....P/N: 8351-13401**  
8 10/100/1000T w/6 PoE at/af unmanaged Ethernet Switch IP54 rated EN50155 w/M12 connectors; 16.8~137.5VDC dual power inputs; -40°C to 75°C
- **TPGS-0008CA-54-24V.....P/N: 8351-12544**  
8 10/100/1000T IP54 rated PoE at/af unmanaged Ethernet Switch w/M12 connectors; 9~36VDC dual power inputs; E-marking certified; -40°C to 75°C
- **TPGS-0008CA-6-54-24V.....P/N: 8351-12541**  
8 10/100/1000T w/6 PoE at/af unmanaged Ethernet Switch IP54 rated w/M12 connectors; 9~36VDC dual power inputs; E-marking certified; -40°C to 75°C
- **TPGS-0008CA-54-24TV.....P/N: 8351-12543**  
8 10/100/1000T IP54 rated EN50155 PoE at/af unmanaged Ethernet Switch w/M12 connectors; 16.8~56VDC dual power inputs; -40°C to 75°C
- **TPGS-0008CA-6-54-24TV.....P/N: 8351-12542**  
8 10/100/1000T w/6 EN50155 PoE at/af unmanaged Ethernet Switch IP54 rated w/M12 connectors; 16.8~56VDC dual power inputs; -40°C to 75°C
- **TPGS-0008CA-54-24V-IGN.....P/N: 8351-1341**  
8 10/100/1000T IP54 rated EN50155 PoE at/af unmanaged Ethernet Switch w/M12 connectors; 9~36VDC dual power inputs; E-marking and ITxPT certified; -40°C to 75°C w/ignition
- **TPGS-0008CA-6-54-24V-IGN.....P/N: 8351-12551**  
8 10/100/1000T w/6 PoE at/af unmanaged Ethernet Switch IP54 rated w/M12 connectors; 9~36VDC dual power inputs; E-marking and ITxPT certified; -40°C to 75°C w/ignition
- **TPGS-0008CA-41-WV.....P/N: 8351-1347**  
8 10/100/1000T IP41 rated EN50155 PoE at/af unmanaged Ethernet Switch w/M12 connectors; 16.8~137.5VDC dual power inputs; -40°C to 75°C
- **TPGS-0008CA-6-41-WV.....P/N: 8351-1348**

- 8 10/100/1000T w/6 PoE at/af unmanaged Ethernet Switch IP41 rated EN50155 w/M12 connectors; 16.8~137.5VDC dual power inputs; -40°C to 75°C  
 ■ **TPGS-0008CA-41-24V.....P/N: 8351-1257**
- 8 10/100/1000T IP41 rated PoE at/af unmanaged Ethernet Switch w/M12 connectors; 9~36VDC dual power inputs; E-marking certified; -40°C to 75°C  
 ■ **TPGS-0008CA-6-41-24V.....P/N: 8351-12571**
- 8 10/100/1000T w/6 PoE at/af unmanaged Ethernet Switch IP41 rated EN50155 w/M12 connectors; 9~36VDC dual power inputs; E-marking certified; -40°C to 75°C  
 ■ **TPGS-0008CA-41-24TV.....P/N: 8351-12572**
- 8 10/100/1000T IP41 rated EN50155 PoE at/af unmanaged Ethernet Switch w/M12 connectors; 16.8~56VDC dual power inputs; -40°C to 75°C  
 ■ **TPGS-0008CA-6-41-24TV.....P/N: 8351-12573**
- 8 10/100/1000T w/6 PoE at/af EN50155 unmanaged Ethernet Switch IP41 rated EN50155 w/M12 connectors; 16.8~56VDC dual power inputs; -40°C to 75°C  
 ■ **TPGS-0008CA-41-24V-IGN.....P/N: 8351-1256**
- 8 10/100/1000T IP41 rated EN50155 PoE at/af unmanaged Ethernet Switch w/M12 connectors; 9~36VDC dual power inputs; E-marking and ITxPT certified; -40°C to 75°C w/ignition  
 ■ **TPGS-0008CA-6-41-24V-IGN.....P/N: 8351-12561**
- 8 10/100/1000T w/6 PoE at/af unmanaged Ethernet Switch IP41 rated w/M12 connectors; 9~36VDC dual power inputs; E-marking and ITxPT certified; -40°C to 75°C w/ignition  
 ■ **TGS-0008CA-54-WV.....P/N: 8351-587**
- 8 10/100/1000T IP54 rated EN50155 unmanaged Ethernet Switch w/M12 connectors; 16.8~137.5VDC dual power inputs; -40°C to 75°C  
 ■ **TGS-0008CA-54-24V.....P/N: 8351-5871**
- 8 10/100/1000T IP54 rated unmanaged Ethernet Switch w/M12 connectors; 9~36VDC dual power inputs; E-marking certified; -40°C to 75°C  
 ■ **TGS-0008CA-54-24TV.....P/N: 8351-58711**
- 8 10/100/1000T IP54 rated EN50155 unmanaged Ethernet Switch w/M12 connectors; 16.8~56VDC dual power inputs; -40°C to 75°C  
 ■ **TGS-0008CA-54-24V-IGN.....P/N: 8351-5872**
- 8 10/100/1000T IP54 rated EN50155 unmanaged Ethernet Switch w/M12 connectors; 9~36VDC dual power inputs; E-marking and ITxPT certified; -40°C to 75°C w/ignition  
 ■ **TGS-0008CA-41-WV.....P/N: 8351-5873**
- 8 10/100/1000T IP41 rated EN50155 unmanaged Ethernet Switch w/M12 connectors; 16.8~137.5VDC dual power inputs; -40°C to 75°C  
 ■ **TGS-0008CA-41-24V.....P/N: 8351-5874**
- 8 10/100/1000T IP41 rated unmanaged Ethernet Switch w/M12 connectors; 9~36VDC dual power inputs; E-marking certified; -40°C to 75°C  
 ■ **TGS-0008CA-41-24TV.....P/N: 8351-58741**
- 8 10/100/1000T IP41 rated EN50155 unmanaged Ethernet Switch w/M12 connectors; 16.8~56VDC dual power inputs; -40°C to 75°C  
 ■ **TGS-0008CA-41-24V-IGN.....P/N: 8351-5875**
- 8 10/100/1000T IP41 rated EN50155 unmanaged Ethernet Switch w/M12 connectors; 9~36VDC dual power inputs; E-marking and ITxPT certified; -40°C to 75°C w/ignition

## OPTIONAL ACCESSORIES

### M12 Connector & Cable

**Connector**

- **ECON120005PF** 5 pin M12 (Female) A-coded 180 degree crimp type connector for power supply
- **ECONM12-04A(F)-C-180** 4 pin M12 (Female) A-coded 180 degree crimp type connector for power supply
- **ECONM12-08X(M)-SPEEDCON** 8 pin M12 (Male) X-coded 180 degree crimp type connector for data, Ethernet CAT6A (10G), shielded, SPEEDCON

**Cable**

- **ECONM12-5P(F)70CM CABLE** 5 pin M12 (Female) A-coded 90 degree cable for power supply, 70cm
- **ECONM12-4P(F)1.5M CABLE** 4 pin M12 (Female) A-coded 90 degree cable for power supply, 150cm
- **ECABM12X83MSTP** 8 pin M12 (Male) X-coded 180 degree RJ45 STP cable for data, shielded, 300cm

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