

# TPGC-0101T

1x 10/100/1000T X-coded EN50155 PoE injector up to 30W

- IEEE802.3at/af up to 30W PoE output
- Dual power inputs 16.8~56VDC with galvanic isolation between input power, PoE and Ethernet
- Wide Operating Temperature from -25°C ~ 70°C (T3 class)
- IP44 aluminum housing for best heat dissipation and preventing moist ingress
- EN50155 certificate for Railway



## OVERVIEW

Lantech TPGC-0101T is a 1x 10/100/1000T X-coded EN50155 PoE injector with IP44 rated protection which meets the high-reliability requirements demanded by industrial rolling stock or harsh outdoor applications.

### 1 PoE at/af port with PoE galvanic isolation design

Compliant with 802.3af/at standard, the PoE injector is able to feed PoE port up to 30 Watt for PD device.

The built-in PoE galvanic isolation up to 1.5KVDC can provide power input to PoE port insulation to prevent cable short, spike, and surge flooding through PoE cabling from damaging the POE port or connected device.

### Dual 24V input with max PoE budget and Inrush current protection

The TPGC-0101T accepts 16.8~56VDC dual power input and

the inrush current protection can suppress the power-up current to the minimum.

### Extended operational temperature

For greater flexibility in the application, the TPGC-0101T supports an extended operating temperature range from -25°C ~70°C.

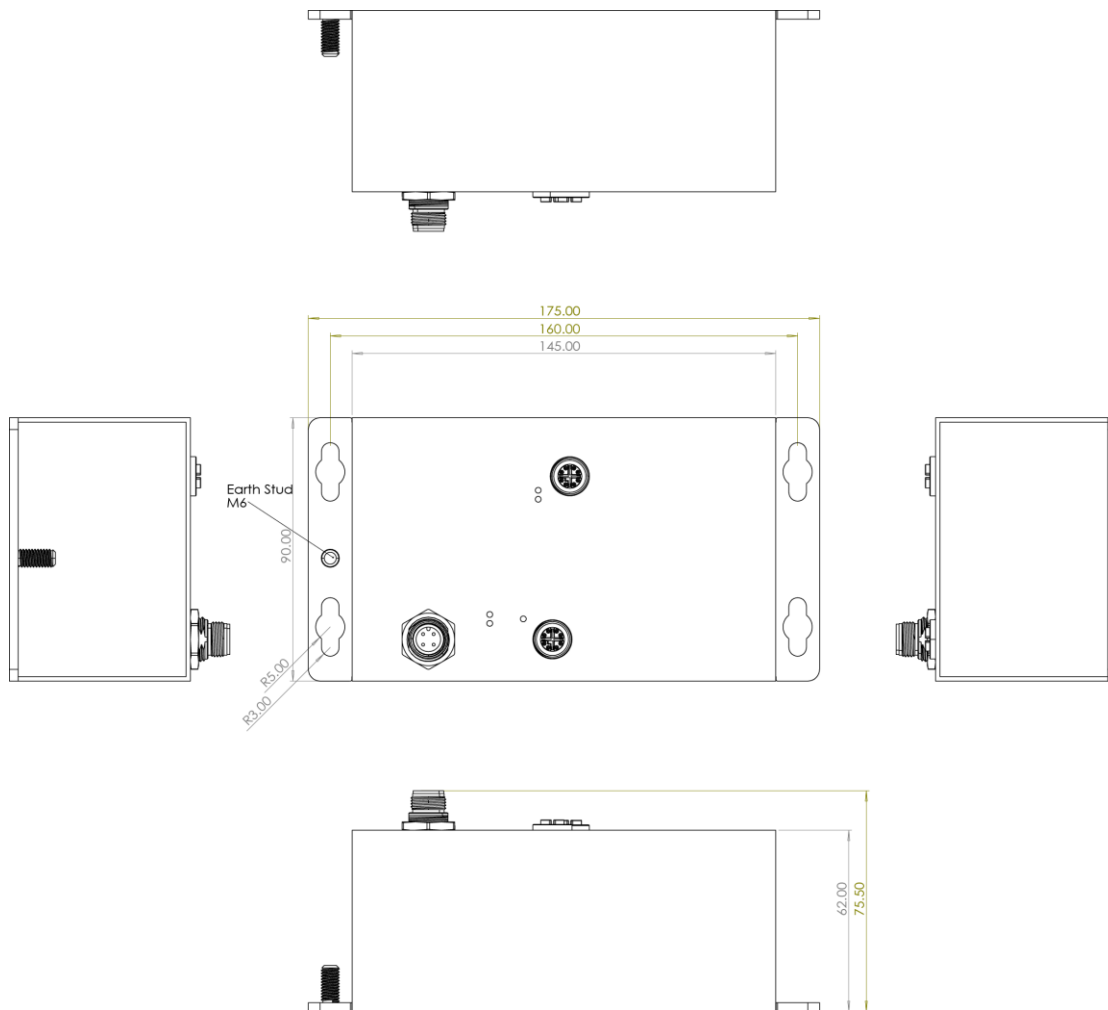
### EN50155, EN45545-2; EN61373 compliance; High ESD protection

TPGC-0101T passed serious tests under extensive Industrial EMI and Safety standards. With EN45545-2 Fire & Smoke and EN50155 verification, the TPGC-0101T is the best PoE injector for railway on-board/track side, vehicle, and mining applications.

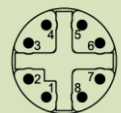
## FEATURES & BENEFITS

- 1x 10/100/1000T X-coded EN50155 PoE injector with M12 connectors and IP44 rated protection wall mount design
- Dual 16.8~56VDC input with Polarity protection
- Galvanic isolation from power input/Ethernet ports to system 1.5KV
- Overvoltage peaks 1.5 kV for 45us (IEC60571)
- Supports IEEE802.3at/af feeding power up to 30W per PoE port
- Wide Operating Temperature -25°C ~70°C
- EN50155, EN45545-2, EN61373

**DIMENSIONS (unit=mm)**



**SPECIFICATIONS**

Hardware Specification		10/100/1000T	
IEEE Standard	IEEE802.3 10BASE-T Ethernet IEEE802.3u 100BASE-T Ethernet IEEE802.3ab 1000Base-T IEEE802.3x Flow Control and Back Pressure IEEE802.3at/af Power over Ethernet		1:TXD1+ 5:5:5:5 2:TXD1- 6:6:6:6 3:RXD2+ 7:7:7:7 4:RXD2- 8:8:8:8
Transfer Rate	14,880pps for Ethernet port 148,800pps for Fast Ethernet port 1,488,000pps for Gigabit Ethernet port	Power Supply	Dual input 16.8~56VDC
Connector	Data In 10/100/1000T: 1 x M12, 8-pole X-coded, Female with auto MDI/MDI-X function Data Out 10/100/1000TX: 1 x M12, 8-pole X-coded, Female with auto MDI/MDI-X function Power connector: 1 x M12, 4-pole A coded, Male	Power Consumption	16.5W with PoE
LED	Per unit: Power 1 (Green), Power 2 (Green), Ethernet: Link/Activity (Green) PoE: (Green)	Power Budget	Total 30W
PoE pin assignment	M12 Data out port support IEEE 802.3at/af End-point. Per port provides up to 30W	Operating Humidity	5% to 95% (Non-condensing)
		Operating Temperature	-25°C~70°C (-13°F~158°F)
		Storage Temperature	-40°C~85°C (-40°F~185°F)
		Case Dimension	Aluminum case, 175mm(W)x75.5mm(H)x90mm(D)
		Weight	500g
		Installation	Wall Mount Design
		EMC	FCC Part 15, Subpart B

ICES-003 Issue7
EN 55035:2017/A11:2020
EN 55032:2015/A11:2020
IEC 61000-4-2:2008
IEC 61000-4-3:2020
IEC 61000-4-4:2012
IEC 61000-4-5:2014+AMD1:2017 CSV
IEC 61000-4-6:2023
IEC 61000-4-8:2009
IEC 61000-6-2:2016
IEC 61000-6-4:2018

	BS EN 55035:2017+A11:2020
	BS EN 55032:2015+A11:2020
Railway compliance	EN 50155:2021
	EN 50121-4:2016/A1:2019
	EN 50121-3-2:2016/A1:2019
	EN 61373:2010
Fire Safety	EN45545-2
MTBF	TBC hrs (standards: IEC 62380)
Warranty	5 years

\*\*Optional  
\*Future release

## ORDERING INFORMATION

All model packages include M12 caps and wall mount brackets.

- **TPGC-0101T-1-44-24TVI-C.....P/N: 8450-221**  
1x 10/100/1000T PoE injector up to 30W, dual 16.8~56VDC input; Operating Temperature -25°C to 70°C w/coating

## 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

**Cable**

- **ECONM12-5P(F)70CM CABLE** 5 pin M12 (Female) A-coded 90 degree cable for power supply, 70cm

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