



TSPL-101GT-M12 Series

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➔ **EN50155 Industrial 1-port Gigabit High Power PoE Splitter, M12 connector**

Features

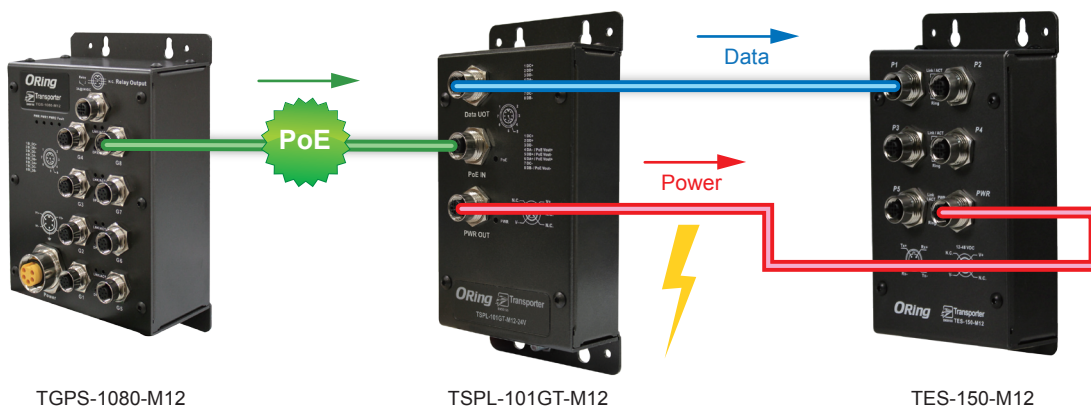
- Leading EN50155-compliant Ethernet switch for rolling stock application
- Fully compliant with IEEE802.3at standard
- Supports 10/100/1000Base-T(X) for PoE In and Data Out
- Power Short Circuit Protection for Power Output
- Auto protection for Over Voltage Power Input
- Supports Power Outputs up to 24Watts Max.
- Ultra-rugged enclosure M12 connector for toughest industrial usages
- Wall Mounting enabled



Introduction

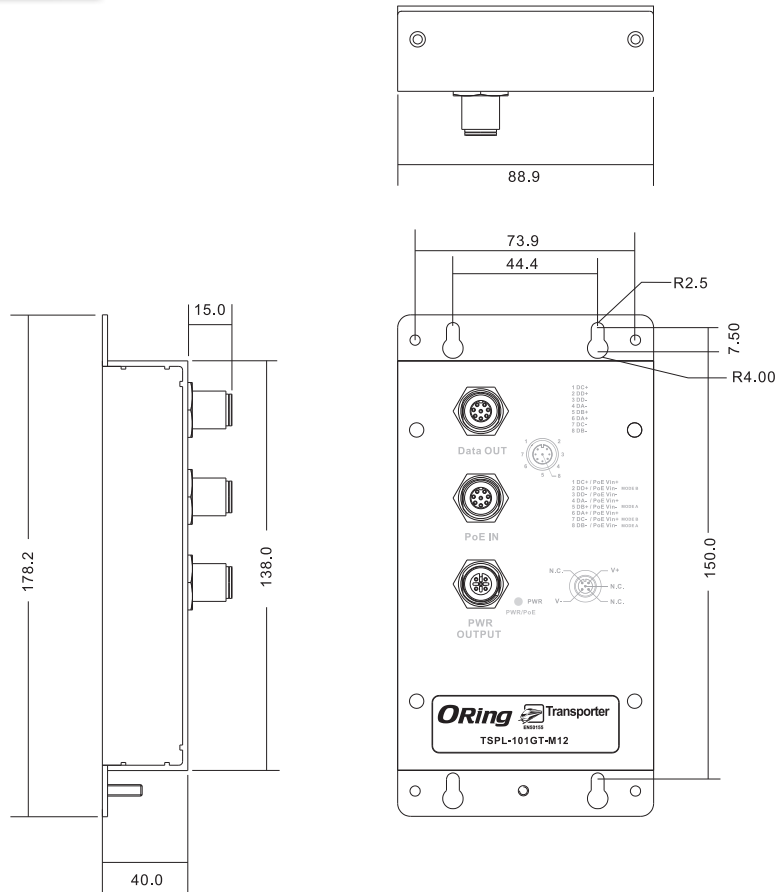
ORing's Transporter™ series PoE Splitters are designed for industrial applications, such as rolling stock, vehicle, and railway applications. TSPL-101GT-M12 series is high power PoE Splitter for use in Power over Ethernet systems which is compliant with EN50155 requirement. It is specifically designed for the toughest industrial environments. TSPL-101GT-M12 series EN50155 PoE Splitter use M12 connectors to ensure tight, robust connections, and guarantee reliable operation against environmental disturbances, such as vibration and shock. With Ethernet Input (data + power) port and Output (data only) port, TSPL-101GT-M12 series may split power from existing PoE connection and convert up to 24VDC/1A or 12VDC/2A for power hungry applications such as Wireless APs, Security cameras and IP Phones. The internal current limit, short-circuit and overload protection are implemented for use as a DC power supply.

Practical Operation



- Industrial Ethernet Switch
- Industrial Media Converter
- Industrial Device Server
- Industrial Wireless Access Point
- Industrial Cellular VPN Router
- Industrial M2M Gateway
- Accessories
- Network Management Software

Dimensions



(Unit=mm)

Connector and Pin Definition

[PoE Mode A]

1000 Base-T

1000 Base-T				
RJ-45 Input (Data and Power)			RJ-45 Output (Data Only)	
Pin	Symbol	Description	Symbol	Description
1	BI_DA+ (Vdc+)	Data BI_DA+ and Feeding Power(+)	BI_DA+	Data BI_DA+
2	BI_DA- (Vdc+)	Data BI_DA- and Feeding Power(+)	BI_DA-	Data BI_DA-
3	BI_DB+ (Vdc-)	Data BI_DB+ and Feeding Power(-)	BI_DB+	Data BI_DB+
4	BI_DC+	Data BI_DC+	BI_DC+	Data BI_DC+
5	BI_DC-	Data BI_DC-	BI_DC-	Data BI_DC-
6	BI_DB- (Vdc-)	Data BI_DB- and Feeding Power(-)	BI_DB-	Data BI_DB-
7	BI_DD+	Data BI_DD+	BI_DD+	Data BI_DD+
8	BI_DD-	Data BI_DD-	BI_DD-	Data BI_DD-

10/100 Base-T(X)

10/100 Base-T(X)				
RJ-45 Input (Data and Power)			RJ-45 Output (Data Only)	
Pin	Symbol	Description	Symbol	Description
1	Rx+ (Vdc+)	Data Receive and Feeding power(+)	Rx+	Data Receive
2	Rx- (Vdc+)	Data Receive and Feeding power(+)	Rx-	Data Receive
3	Tx+ (Vdc-)	Data Transmit and Feeding power(-)	Tx+	Data Transmit
4	NC	Not Connected	NC	Not Connected
5	NC	Not Connected	NC	Not Connected
6	Tx- (Vdc-)	Data Transmit and Feeding power(-)	Tx-	Data Transmit
7	NC	Not Connected	NC	Not Connected
8	NC	Not Connected	NC	Not Connected

Note: pins 3 and 6 (Vdc-) should not be shorted to ground

[PoE Mode B]

1000 Base-T

1000 Base-T				
RJ-45 Input (Data and Power)			RJ-45 Output (Data Only)	
Pin	Symbol	Description	Symbol	Description
1	BI_DA+	Data BI_DA+	BI_DA+	Data BI_DA+
2	BI_DA-	Data BI_DA-	BI_DA-	Data BI_DA-
3	BI_DB+	Data BI_DB+	BI_DB+	Data BI_DB+
4	BI_DC+ (Vdc+)	Data BI_DC+ and Feeding Power(+)	BI_DC+	Data BI_DC+
5	BI_DC- (Vdc+)	Data BI_DC- and Feeding Power(+)	BI_DC-	Data BI_DC-
6	BI_DB-	Data BI_DB-	BI_DB-	Data BI_DB-
7	BI_DD+ (Vdc-)	Data BI_DD+ and Feeding Power(-)	BI_DD+	Data BI_DD+
8	BI_DD- (Vdc-)	Data BI_DD- and Feeding Power(-)	BI_DD-	Data BI_DD-

10/100 Base-T(X)

10/100 Base-T(X)				
RJ-45 Input (Data and Power)			RJ-45 Output (Data Only)	
Pin	Symbol	Description	Symbol	Description
1	Rx+	Data Receive	Rx+	Data Receive +
2	Rx-	Data Receive	Rx-	Data Receive -
3	Tx+	Data Transmit	Tx+	Data Transmit +
4	Vdc+	Feeding power(+)	NC	Not Connected
5	Vdc+	Feeding power(+)	NC	Not Connected
6	Tx-	Data Transmit	Tx-	Data Transmit -
7	Vdc-	Feeding power(-)	NC	Not Connected
8	Vdc-	Feeding power(-)	NC	Not Connected

Note: pins 7 and 8 (Vdc-) should not be shorted to ground

Specifications

ORing Injector Model	TSPL-101GT-M12-24V	TSPL-101GT-M12-12V
Physical Ports		
10/100/1000Base-T(X) Port with PoE Input in M12 Auto MDI/MDIX	1 x M12 connector (8-pin M12 A-coding)	