TP-MS4x4

DATA SHEET

4 port PoE Gigabit Midspan MultiVolt™ Injector

Features

- **High Power, Gigabit 4 Port Midspan PoE Injector**
- **Up to 1A per Individual Port**
- **Surge Protection on Data In Ports**
- **Universal PoE Voltage 12VDC to 57VDC.**
- **Supports Different PoE Voltage on Each Port.**
- **Supports Reverse Voltage on Individual Ports.**
- **Powers 802.3af and Passive PoE Devices**
- **DIN Rail Mountable – Includes DIN Rail adapters.**

Applications

- **Wireless Access Points and Client Devices**
- **IP Phone and Security Camera Systems**
- **Power network devices from a central network room**

Description

The **TP-MS4x4** mid span PoE power sources are used for supplying PoE and data to multiple devices from a central location such as an operations room or equipment cabinet. The PoE devices feature a separate data-in port coupled with a data out/PoE port. The PoE function is considered Passive PoE and supports Gigabit Ethernet. The Midspan features Universal Voltage (MultiVolt™) PoE outputs where the PoE voltage equals the input voltage. All ports can have the same PoE voltage or you can assign different voltages to different ports. This is useful for powering different devices with different PoE voltage requirements. The Midspan also allows some or all PoE ports to be reverse voltage PoE which is required by some Passive PoE devices like Canopy and EnGenius.

PoE DC Voltage (12V-57V) is supplied on pins 4,5 (V+) and 7,8 (V-). Maximum power output per port is 1A. The individual outputs are overcurrent, over/under voltage and short circuit protected.

The midspan is DIN Rail mountable with the included DIN Rail brackets.

Device Pinouts

RJ-45 Input (Data Only)			RJ-45 Output (Data & Power)	
Pin	*Symbol*	*Description*	*Symbol*	*Description*
1	BI_DA+	Data RX+	BI_DA+, Vo-	Data RX(+)
2	BI_DA-	Data RX-	BI_DA-, Vo-	Data RX(-)
3	BI_DB+	Data TX+	BI_DB+, Vo+	Data TX(+)
4	BI_DC+	Data RX+	BI_DC+, Vo+	Data RX(+) , DC power(+)
5	BI_DC-	Data RX-	BI_DC-, Vo+	Data RX(-) , DC power(+)
6	BI_DB-	Data TX-	BI_DB-, Vo+	Data TX(-)
7	BI_DD+	Data RX+	BI_DD+, Vo-	Data RX(+) , DC power(-)
8	BI_DD-	Data RX-	BI_DD-, Vo-	Data RX(-) , DC power(-)

Specifications

	TP-MS4x4
Ethernet Standard	IEEE802.3/IEEE802.3u/IEEE802.3ab (10 base-T/100base-T/1000base-T)
PoE Standard	Passive PoE
Shielded RJ45 Ports	4 data-in ; 4 data/PoE out
Max Device Distance	100m (328ft)
Maximum PoE Power	Up to 1A Per Port
PoE Protection	Over Current, Over/Under Voltage, Short Circuit
LED's	Green - A valid power device is detected on this port. Active current is >80mA. Red - No power device is detected on this port. Off - No input power, or input source in alarm condition. Alarm: voltage is more than 58VDC, or less than 10.5VDC. Alarm: current is >1A.
DC Power Input	11VDC to 57VDC (Negative common)
Self Consumption	<5W
Data Input Surge Protection	IEC61000-4-2 (ESD) ±15kV (air), ±8kV (contact) IEC61000-4-4 (EFT) 40A (5/50ns) IEC61000-4-5 (Lightning) 20A (8/20μs)
Operating Temperature	-40C to +75C (-40F to 167F)
Operating Humidity (RH)	Up to 99% , Non Condensing
Storage Temperature	-50C to +85C (-58F to 185F)
Dimensions (LxWxH)	90mm x 118mm x 40mm (3.5" x 4.6" x 1.5")
Weight	0.45kg (1lb)

Notes:

- All shipments F.O.B. Bluffdale, UT 84065
- Tycon Power® PoE Midspan Inserters carry a 3 year limited warranty

Rear Panel View

Jumper Settings

Jumper / Input	A (1-2)	B (1-3)	C (1-4)	PoE Output
VIN1+	1	1	1	**PoE 1/2/3/4=VIN1 (Factory setting)**
VIN1− VIN4+	1	1	0	PoE 1/2/3=VIN1 PoE 4=VIN4
VIN1+ VIN3+	1	0	1	PoE 1/2/4=VIN1 PoE 3=VIN3
VIN1+ VIN3+ VIN4+	1	0	0	PoE1/2=VIN1 PoE3=VIN3 PoE4=VIN4
VIN1− VIN2+	0	1	1	PoE1/3/4=VIN1 PoE2=VIN2
VIN1− VIN2+ VIN4−	0	1	0	PoE1/3=VIN1 PoE2=VIN2 PoE4=VIN4
VIN1+ VIN2− VIN3+	0	0	1	PoE1/4=VIN1 PoE2=VIN2 PoE3=VIN3
VIN1− VIN2+ VIN3− VIN4−	0	0	0	PoE 1=VIN1 PoE 2=VIN2 PoE 3=VIN3 PoE 4=VIN4

System Ordering:

TP-MS4X4 4 Port High Power Gigabit PoE Mid Span MultiVolt™ Injector, 11-57VDC Passive PoE

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RoHS compliant

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