

POE /Solar Charge Controllers

Features

- Dual Input - Charges 12V or 24V Batteries from Solar Panel and / or Passive POE
- Built in DC to DC converter with various Passive POE output voltages available: 12V,18V,24V,48V
- Compact and high temperature operation
- Low self consumption < 0.5W



TP-SCPOE Charge Controller

Applications

- Remote Power Systems; Surveillance, Sensors
- Wireless Stations ; AP / Client / Repeaters
- UPS Systems ; Lighting, Fences, Gates

Description

Tycon Power Systems unique POE/Solar charge controllers have dual inputs to charge batteries from a POE source and also a secondary source like solar panels in order to provide redundancy and insure 100% uptime for critical applications. The solar panel input takes priority so that when the sun is shining the grid power usage is minimized. They have a built in POE inserter with DC to DC converter that delivers 12V, 18V, 24V or 48V at the POE port. They have full electronic protections for short circuit, reverse current, overvoltage, overcharge and over discharge.

They have five LED indicators to give a quick visual status if current is being supplied by a POE source or solar panel, if battery is charging, if load output is turned on and a warning if battery is connected with reverse polarity.

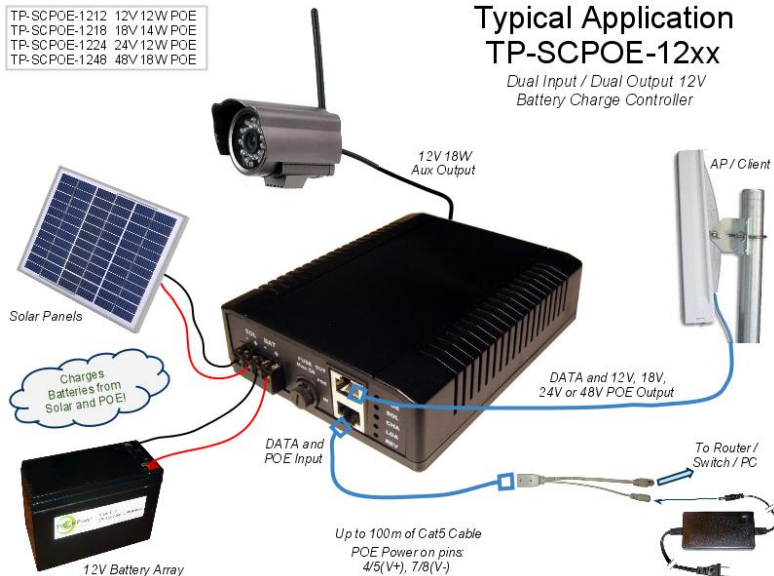
Solar and Battery Connections are via 4 screw terminals for wire size up to 12AWG. POE Input and Output is via 2 RJ45 shielded connectors. There is a secondary output connector on the back with 5 screw terminals for connecting other electronics to the controller using up to 12AWG wire. This secondary output is equal to the battery voltage.

The controllers are externally fused with a standard replaceable fuse.

TP-SCPOE-1212	12V 12W POE
TP-SCPOE-1218	18V 14W POE
TP-SCPOE-1224	24V 12W POE
TP-SCPOE-1248	48V 18W POE

Typical Application TP-SCPOE-12xx

Dual Input / Dual Output 12V
Battery Charge Controller



Specifications

	TP-SCPOE-1212	TP-SCPOE-1218	TP-SCPOE-1224	TP-SCPOE-1248	TP-SCPOE-2424	TP-SCPOE-2448
Solar Input Voltage	12V - 36Vmax @ 8A max (up to 135W 12V or 270W 24V solar panel)				24V - 36Vmax @ 8A max (up to 270W 24V Panel)	
POE Input Voltage	18V - 57Vmax @ 2.6A max				36V - 57V max @ 1.3A max	
Battery Voltage	12V				24V	
POE Output	11V to15V @ 1A	18V @ 0.8A	24V @ 0.5A	48V @ 0.375A	24V @ 1A	48V @ 0.5A
Secondary Output	11V to 15V @ 1.5A max				20V to 27V @ 1.5A max	
Maintenance Voltage	13.8+/-0.3V				27.3 +/- 0.5V	
Overcharge Protection	14.4 +/- 0.3V				28.6 +/- 0.3V	
Over Discharge Voltage	Output OFF: 11.0 +/-0.3V Output ON: 12.0 +/-0.3V				20.0 +/-0.3V 24.2 +/-0.3V	
Self Consumption	< 0.5W					
Max Wire Size	12 AWG					
Operating Temp	-30°C to 60°C (-22°F to 140°F)					
Dimensions	159 x 118 x 40mm (6.3 x 4.6 x 1.6")					
Weight	312 g (11 oz)					

POE Pinout

RJ-45 Input (Data & Power)			RJ-45 Output (Data & Power)	
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 in	DC Power to battery charge circuit	+Vdc out	DC power(+) to device
5	+Vdc in	DC Power to battery charge circuit	+Vdc out	DC power(+) to device
6	TX-	Data Transmit(-)	TX-	Data Transmit(-)
7	-Vdc in	DC Power to battery charge circuit	-Vdc out	DC power(-) to device
8	-Vdc in	DC Power to battery charge circuit	-Vdc out	DC power(-) to device

Notes:

- All shipments F.O.B. Draper, UT 84020
- TP-SCPOE Charge Controllers carry a 1 year warranty

System Ordering:

TP-SCPOE-1212 12V in 12V out POE/Solar Charge Controller

TP-SCPOE-1218 12V in 18V out POE/Solar Charge Controller

TP-SCPOE-1224 12V in 24V out POE/Solar Charge Controller

TP-SCPOE-1248 12V in 48V out POE/Solar Charge Controller

TP-SCPOE-2424 24V in 24V out POE/Solar Charge Controller for 24V battery systems

TP-SCPOE-2448 24V in 48V out POE/Solar Charge Controller for 24V battery systems

For further information contact:

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