

PoE /Solar Charge Controller

Features

- Dual Input - Charges 24V Batteries from Solar Panel and / or Passive PoE
- Supports up to 60W Device Load
- Regulated Output Voltage
- Compact and high temperature operation
- Low self consumption < 0.5W

Applications

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



TP-SCPOE-2424-HP Charge Controller

Description

Tycon Solar® 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 regulated voltage output. 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 5 screw terminals for wire size up to 10AWG. 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 10AWG wire. This PoE output and secondary output are regulated at 24VDC to prevent damage to devices due to overvoltage. The controllers are externally fused with a standard replaceable fuse.

The TP-SCPOE-2424-HP can provide up to 60W total power for powering various equipment.

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

Specifications

	TP-SCPOE-2424-HP
Solar Input Voltage	30V - 55Vmax @ 10A max
POE Input Voltage	36V - 57V max @ 2.6A max
Battery Voltage	24V
POE Output	24V @ 1.0A
Secondary Output	20V to 25V @ 1.5A max
Maintenance Voltage	27.3 +/- 0.5V
Overcharge Protection	28.6 +/- 0.3V
Over Discharge Voltage	Load Output Off: 20.0 +/-0.3V Load Output On: 24.3 +/-0.3V
Load-On Self Consumption	< 0.5W
Load-Off Consumption	1.7mA Typ 0.02W
Max Wire Size	10 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)

Notes:

- All shipments F.O.B. Bluffdale, UT 84065
- TP-SCPOE Charge Controllers carry a 3 year warranty



Back panel view

TP-SCPOE-2424-HP Typical Application



System Ordering:

TP-SCPOE-2424-HP 24V in 24V 60W out PoE/Solar Charge Controller for 24V battery systems

For further information contact:

Tyconsystems.com

