

## TSP - Total System Power

Outdoor Cable Plant Network Power Supply / UPS



### The TSP displays:

- ✓ Individual Battery Voltages
- ✓ Transponder Data:
  - Firmware rev #
  - Mode (single / dual)
  - MAC address(es)
  - Status
  - RX and TX symbol rate
  - RX and TX frequency (in MHz)
  - RX and TX power (in dBmV)
  - RX and TX modulation type

*\*Requires updated CTSP-SM8  
\*\*Also available on updated CTSP-SM5-1*

The TSP is the industry's most rugged powering/UPS solution for the outside plant. Achieve peace of mind with no load interruption due to the TSP's zero transfer time. Each unit has a bright, scrolling display that shows Status, Input Volts & Amps, Output Volts & Amps, and Battery Volts & Amps, all without keystrokes. The TSP also features a universal electronics/inverter module that is common across all battery and input/output voltages. It has the widest thermal operating range between -40° and 158°F (-40° – 70°C), and does not require a cooling fan. All printed circuit boards are conformally coated providing protection against moisture and corrosion. Even in the most extreme conditions, the TSP continues to provide reliable power to your network. Add in the embedded DOCSIS™ transponder to remotely monitor power supply functions and status per the SCTE-HMS standards.

## FEATURES

- The industry's most rugged powering / UPS solution
- Wide thermal operating range
- No fan required for increased reliability
- Up to 94% efficiency (when online)
- Conformally coated PCB's
- Zero Transfer Time
- 6, 15 & 18 Amp versions available
- "Embedded" HMS / DOCSIS and HMS / EuroDOCSIS Transponders
- Bright scrolling display shows:
  - Status
  - Output V+I
  - Input V+I
  - Battery V+I without keystrokes
- Universal electronics / inverter module
- Works with all battery and input / output voltages
- Now available as kits or individual modules
- Improved firmware with expanded feature set
- Backed by 30+ years of powering experience

# Specifications - TSP Total System Power Outdoor Cable Plant Network Power Supply / UPS

	6 Amp	15 Amp	18 Amp
<b>Electrical</b>			
AC Mains Input Nominal (VAC):	120	120, 240	120, 240
AC Mains Input Voltage Tolerance:	Standard: -20 to +10%, Extended: CTSPTM9156120-5 is +/- 30%		
Mains Frequency (Hz):	Both 50 and 60Hz models typically available, Nominal frequency stable to +/- 3Hz maximum		
Battery String Voltage (VDC):	36	36 or 48	36 or 48
Output Voltage (VAC):	Quasi-square wave 60, 75 or 87VAC user selectable, Factory set to 60VAC		
Input Load Factor:	0.9 Nominal		
Load Power Factor:	0.85 - 1 Non-reactive		
Load Efficiency:	Up to 94% mains / 85% inverter		
Transfer Time:	Zero, uninterrupted output		
Battery Charging Current:	Default: 10 Amps minimum at full load, Programmable to 2 Amps		
Battery Temperature Sensing:	Post mounted, 1 to 4		
Battery Temperature Compensation:	Default: -5mV/°C/Cell from -40 to 50°C, Fixed above 50°C, Programmable		
Battery Low Voltage Cutoff:	Default: 1.75V/Cell, Programmable		
Battery Recharge Time:	Typical 80 AH battery will reach 90% capacity in 8 hours		
<b>Mechanical</b>			
Module Dimensions TM (HxWxD):	7.6 x 10.2 x 11.6 Inches (19.3 x 26 x 29.5 cm)		7.6 x 10.2 x 12.6 Inches (19.3 x 26 x 32 cm)
Module TM Weight:	50 lbs (23 kg)	60 lbs (27 kg)	70 lbs (32 kg)
Module Dimensions EM (HxWxD):	8.3 x 8.0 x 12.3 Inches (21 x 20.3 x 31.2 cm)		
Module EM Weight:	17 lbs (8 kg)		
Mated TM/EM Dimensions (HxWxD):	8.3 x 15.8 x 12.3 Inches (21 x 40.1 x 31.3 cm)		8.3 x 15.8 x 12.6 Inches (21 x 40.1 x 32 cm)
<b>Environmental / Agency Specifications</b>			
Operating Temperature:	-40 to 158°F (-40 to 70°C)		
Relative Humidity:	Up to 95% (non-condensing)		

## Modules - Power supplies can also be provided as packaged "kits"

Module Number	Type	AC Out	AMP	Hz	AC In/Tol	Batt
CTSP9066120-3	TM	60/75/87	6	60	120 / Std	36
CTSP9156120-3	TM	60/75/87	15	60	120 / Std	36
CTSP9156120-5	TM	60/75/87	15	60	120 / Ext	36
CTSP9156240-3	TM	60/75/87	15	60	240 / Std	36
CTSP9186120-3	TM	60/75/87	18	60	120 / Std	36
CTSP9156120-2	TM	60/75/87	15	60	120 / Std	48
CTSP9156240-2	TM	60/75/87	15	60	240 / Std	48
CTSP9186120-2	TM	60/75/87	18	60	120 / Std	48

## Accessories

Model Number	Description
CTSP-SPL	TSP Surge Protector, one each for AC input and output <i>Now with LED indicator</i>
CTSP-SM7	TSP Analog Status Monitoring Module
CTSP-SM5-1	TSP HMS/Digital Status Monitoring Module
CTSP-SM8	TSP Embedded HMS/DOCSIS2.0 Transponder
CTSP-SM8E	TSP Embedded HMS/EuroDOCSIS Transponder
CTSPBCK-31	TSP SM5/8 Battery Harness Cable, one per battery string
960-0563	TSP Power cord, UK style, BS1363 plug
960-0565	TSP Power cord, Euro style, CEE7/7 plug
960-0567	TSP Power cord, AS style, AS3112 plug
CT-OW5514A	TSP cable to retrofit Myers EPS into another brand's enclosure



CTSP-SM5-1



CTSP-SM8