TYCON Solar®

Outdoor Remote Power Systems

Features

- **Complete 170W Remote Power Solution for Off-Grid Operation**
- **Weatherproof Outdoor Enclosures with up to 400Ah Battery**
- **Enclosures can be Wall or Pole Mounted (pole not included)**
- **High Performance Sealed Lead Acid AGM Batteries**
- **MPPT and PWM Solar Charge Controllers, some with PoE output**
- **Thermostatically Controlled Ventilation**

RPL 170W Solar System

Applications

- **Wireless Base Stations**
- **Wireless Bridge and Repeaters**
- **Remote Lighting**
- **Off-Grid Power**
- **Surveillance Cameras**
- **Backup Power**

Description

The RemotePro® 170W Series outdoor power systems are designed for applications that require a primary off-grid power source to run various equipment. The vented weatherproof enclosures have generous space available inside for mounting customer equipment. Multiple mounting brackets are welded inside the enclosure for mounting DIN rails or flat plates.

The systems are available with MPPT or PWM temperature compensated solar charge controllers. Some of the PWM systems are available with 24V or 48V 10/100 Passive PoE outputs. The solar controllers turn off the load automatically if the battery voltage drops too low, in order to preserve battery life. The load turns on automatically once the battery voltage recovers.

The outdoor enclosures are powder coated steel or aluminum. They are hinged and gasket sealed with a locking closure that accepts a common padlock for security. They have four cable gland ports for CAT5/6 cable, antenna cables/connectors or other cabling. Included is a thermostatically controlled fan assembly which turns on automatically when the temperature exceeds 45°C.

The high quality solar panels have a 25 year power output guarantee and a +5W output tolerance. The enclosures and solar mount can be mounted to a wall or pole (2-4") with the included mounting system.

Batteries are a Non-Spillable Valve Regulated Sealed Lead Acid Advance Glass Matt (AGM) type which have excellent temperature and deep discharge performance. Expected battery life exceeds 5 years.

The systems come with all cabling required to connect the batteries to the controller and 20' outdoor rated cable to connect the solar panels to the controller.

Specifications – Controller Specific

	PWM-PoE	PWM	MPPT
Controller Type	10A PWM with PoE	PWM with LCD Display	MPPT with display and RS485
Controller Outputs	24V 1.5A wire terminal and 24V or 48V Passive PoE	20A Wire Terminal	20A or 30A Wire Terminal
Bulk Charge	28.6V @ 24V Battery	14.4V @ 12V Battery 28.8V @ 24V Battery	14.4V @ 12V Battery 28.8V @ 24V Battery
Float Charge	27.3V @ 24V Battery	13.8V @ 12V Battery 27.6V @ 24V Battery	13.8V @ 12V Battery 27.6V @ 24V Battery
Over-discharge protection	20V @ 24V Battery	11.1V @ 12V Battery 22.2V @ 24V Battery	11.1V @ 12V Battery 22.2V @ 24V Battery
Over-discharge recovery volts	24.3V @ 24V Battery	12.6V @ 12V Battery 25.2V @ 24V Battery	12.6V @ 12V Battery 25.2V @ 24V Battery
Controller Self Consumption	<0.5W	<0.3W	<1W

Specifications – Enclosure Specific

	RPS	RPL	RPSTL
Battery Type	Maintenance Free Non-Spillable Valve Regulated Sealed Lead Acid AGM		
Battery Life	5+ years		
Enclosure Type	ENC-AL-12x14x15 Pole/Wall Mount, Powder Coat Aluminum	ENC-AL-21x14x15 Pole/Wall Mount, Powder Coat Aluminum	ENC-STL-24x24x16 Pole/Wall Mount, Powder Coat Steel
Enclosure Size	12 x 14 x 15" (305 x 356 x 381mm)	21 x 14 x 15 (537 x 356 x 381mm)	23.9 x 23.9 x 16.1" (608 x 608 x 409.5mm)
Internal Mount Features	DIN Rail/Flat Plate Mounting Brackets Welded to Door and Back		
Solar Panel Dims (L x W x T)	170W Solar Array 62" x 27" x 1.4" (1575 x 678 x 35mm)		
Operating Temperature	-30°C to +60°C (-22°F to 140°F)		
System Weight (no batteries)	41 lb (19 kg)	48 lb (22 kg)	109 lb (49 kg)
Battery Weight	40.3 lb (18.3 kg) (Each 50Ah Battery)		
Wind Speed Rating	90MPH		
Warranty	3 Years		

RPS Enclosure interior without batteries or controller

RPL Enclosure interior without batteries or controller

RPSTL Enclosure interior without batteries or controller

System Ordering:

Model #	Enclosure Type	Battery Voltage	Battery Capacity @12V	Rated Continuous Power with 6hrs Peak Sun	Backup Time @ Rated Power	Controller Type	Outputs	Solar Panel Size
RPS2424-100-170	Small Aluminum	24V	100Ah	25W	>24hrs	PWM-PoE	24V 1.5A + 24V 30W PoE	170W
RPS2448-100-170	Small Aluminum	24V	100Ah	25W	>24hrs	PWM-PoE	24V 1.5A +48V 30W PoE	170W
RPS12/24-100-170	Small Aluminum	12/24V	100Ah	25W	>24hrs	PWM	12/24V 20A	170W
RPS12/24M-100-170	Small Aluminum	12/24V	100Ah	25W	>24hrs	MPPT	12/24V 20A	170W
RPL2424-200-170	Large Aluminum	24V	200Ah	37W	>32hrs	PWM-PoE	24V 1.5A + 24V 30W PoE	170W
RPL2448-200-170	Large Aluminum	24V	200Ah	37W	>32hrs	PWM-PoE	24V 1.5A +48V 30W PoE	170W
RPL12/24-200-170	Large Aluminum	12/24V	200Ah	37W	>32hrs	PWM	12/24V 20A	170W
RPL12/24M-200-170	Large Aluminum	12/24V	200Ah	37W	>32hrs	MPPT	12/24V 20A	170W
RPSTL12/24M-200-170	Large Steel	12/24V	200Ah	37W	>32hrs	MPPT	12/24V 20A	170W

Part Number Definition:

R P L 12/24M-200-170

Enclosure Type
S - Small Aluminum
L - Large Aluminum
STL – Large Steel

Battery Voltage/PoE
2424 – 24VDC, 24V PoE
2448 – 24VDC, 48V PoE
12/24 – 12/24V PWM
12/24M – 12/24V MPPT
12/48M – 12/24/48V MPPT

12V Storage Capacity
100 - 100Ah
200 - 200Ah
400 – 400Ah

Solar Panel Output
85 – 85 Watt
170 – 170 Watt
340 – 340 Watt

AGM 12V 52Ah Battery

Available Accessories For MPPT Controller

TPDIN-Monitor-WEB3 V2 Remote Monitor with RS485 Interface + TPDIN-CABLE-485

TP-SC-WIFI   WiFi Adapter for MPPT

For further information contact:
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RoHS compliant

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