



RemotePro® 1440+W Series

DATA SHEET

Outdoor Remote Power Systems

Features

- Complete 1.4KW to 2.2KW Remote Power Solutions for Off-Grid Operation.
- Supports up to 360W continuous power with 6hrs peak sun.
- Weatherproof Outdoor Enclosures with up to 1440Ah Battery
- Expandable Ground Mounted Solar Mount
- High Performance Sealed Lead Acid AGM Batteries
- MPPT Solar Charge Controllers with RS485 Interface
- Thermostatically Controlled Ventilation



TPAL-1440W
Solar System

Applications

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

Description

The RemotePro® 1440+W Series outdoor power systems are designed for applications that require a primary off-grid power source. 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 temperature compensated solar charge controllers with an RS485 interface for remote monitoring with a Tycon TP-DIN-Monitor-WEB3 or TP-SC-WIFI adapter. 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 diamond plate aluminum ground mounted type. They are hinged and gasket sealed with locking closures. 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.

Batteries are maintenance free, Non-Spillable, Valve Regulated, Sealed Pure Lead Carbon Advance Glass Mat (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.

The solar mount includes the concrete anchors that are necessary for mounting. Tilt adjustment range is 10-65 deg and can be adjusted by one person. The mount can be expanded to 6 panels (Kit# TPSM-350x6-AdapterKit). This is useful if more solar capacity is needed in the future.

Specifications

	RPSTL	RPAL
Battery Type	Maintenance Free, Non-Spillable, Valve Regulated Sealed Lead Acid, AGM	Maintenance Free, Non-Spillable, Valve Regulated, Sealed, Pure Lead Carbon AGM
Battery Life		54 years
Controller Type	24/48V MPPT with display and RS485 Interface	
Controller Outputs	30A Wire Terminal	
Bulk Charge	29.8V @ 24V Battery 57.6V @ 48V Battery	
Floating Charge	27.6V @ 24V Battery 55.2V @ 48V Battery	
Over-discharge protection	22.2V @ 24V Battery 44.4V @ 48V Battery	
Over-discharge recovery volts	25.2V @ 24V Battery 50.4V @ 48V Battery	
Controller Self Consumption	<1W	
Enclosure Type	ENC-STL:24x24x16 Pole/Wall Mount, Powder Coat Steel	ENC-AL:65x20x10 Ground Mount, Diamond Plate Aluminum
Enclosure Size	23.9 x 23.9 x 16.1" (609 x 609 x 409.5mm)	65 x 28 x 10" (1651 x 711 x 457mm)
Internal Mount Features	DIN Rail/Rail Plate Mounting Brackets Welded to Door and Back	
Solar Panel Dims (L x W x T)	1440W Solar Array 76 x 154 x 1.6" (1980 x 3912 x 40mm) 2160W Solar Array 117 x 154 x 1.6" (2970 x 3912 x 40mm)	
Operating Temperature	-30°C to +60°C (-22°F to 140°F)	
System Weight (no batteries)	524 lb (239kg) 4 Panel System 598 lb (272 kg) 6 Panel System	491 lb (226kg) 4 Panel System 598 lb (272 kg) 6 Panel System
Battery Weight	40.3lb (18.3kg) (Each 50Ah Battery)	127 lb (57.6kg) (Each 180Ah Battery)
Wind Speed Rating	90MPH	
Warranty		3 Years



RPSTL Enclosure Interior
without batteries or controller



RPAL Diamond Plate Aluminum Ground Mount



24/48V 60A MPPT Controller
with RS485 Interface



AGM 12V 52Ah Battery



AGM 12V 180Ah Battery

System Ordering:

Model #	Enclosure Type	Battery Voltage	Battery Capacity @12V	Rated Continuous Power with 6hrs Peak Sun	Backup Time @ Rated Power	Controller Type	Output	Solar Panel Size
RPSTL24/48M-400-1440	Large Steel	24/48V	400Ah	100W	>24hrs	24/48 MPPT	24/48V 30A	1440W
RPAL24/48M-720-1440	Ground Mount Aluminum	24/48V	720Ah	180W	>24hrs	24/48 MPPT	24/48V 30A	1440W
RPAL24/48M-14-1440	Ground Mount Aluminum	24/48V	1440Ah	315W	>27hrs	24/48 MPPT	24/48V 30A	1440W
RPAL48M-14-2160	Ground Mount Aluminum	48V	1440Ah	360W	>24hrs	24/48 MPPT	48V 30A	2160W

Part Number Definition:

RPSTL 1.4kW 4 Panel Solar System



RPAL 2.1kW 4 Panel Solar System



1.4kW 4 Panel Solar Mount - 10-85 deg Tilt, ground mount

RPAL 24/48M-14-14Enclosure Type:
SL = Large Steel
AL = Ground Mount AlumBattery Volt. / Cell Type:
24/48V = 24/48V MPPT
48V = 48V MPPTUV/Volt./Capacity:
400 = 400Ah
720 = 720Ah
14 = 1440AhSolar Panel Output:
120 = 120 Watt
1440 = 1440 Watt
2160 = 2160 Watt**Available Accessories**TP-DH-Master+WEB v2
Remote Monitor with
RS485 Interface + TP-DH-
CABLE-485TP-SC-WIFI
WiFi Adapter
for MPPT**For further Information contact:**[Tyconsystems.com](http://tyconsystems.com)