



RemotePro® **TPDIN-SC48-20 Series**

DATA SHEET

Outdoor Remote Power Systems

Features

- Complete Remote Power Solutions for Off-Grid Operation.
- TPDIN-SC48-20 Remote Manageable MPPT Solar Controller with Gigabit PoE Switch
- Supports up to 157W continuous power with 6hrs peak sun.
- Weatherproof Outdoor Enclosures with up to 720Ah Battery
- Solar Mounts: Pole/Wall and Ground Mounts
- High Performance Sealed Lead Acid AGM Batteries
- Thermostatically Controlled Ventilation



*RPAL 720W
Solar System*

Applications

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

Description

The RemotePro® TPDIN-SC48-20 Series outdoor power systems are designed for applications that require a primary off-grid power source with an integrated 24/48V PoE Gigabit Switch to power up to 7 PoE devices. 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 have a unique MPPT temperature compensated solar charge controller that provides 7 Gigabit PoE switch ports that are capable of 24V or 48V passive PoE or 802.3at PoE. The controller is remotely manageable over the network. It has user programmable controls to control each port based on parametric limits and provides programmable email alerts. The switch is VLAN compatible. The solar controllers turn off the load automatically if the battery voltage drops too low, to preserve battery life. The load turns on automatically once the battery voltage recovers.

The outdoor enclosures are powder coated steel pole/wall mount or 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 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. The ground mount systems include concrete anchors for securing the solar mount.

RemotePro® TPDIN-SC48-20 Series

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 | 5+ years | |
| Battery Voltage | 48VDC | |
| Controller Type | TPDIN-SC48-20 48V MPPT Solar Controller with Remotely Manageable Gigabit PoE Switch | |
| Controller Outputs | Qty 4 Gigabit 802.3at Ports (also configurable as 24V/48V 0.645A Passive PoE) Qty 3 24V/48V 0.645A Gigabit Passive PoE Ports PoE Power is supplied on pins 4,5(V+) and 7,8(V-) (Mode B) Qty 1 Auxiliary 24V/48V 2.25A wire terminal output | |
| Bulk Charge | 57.6V | |
| Float Charge | 55.2V | |
| Over-discharge protection | 42V- 48V (settable in user interface) | |
| Over-discharge recovery volts | 44V– 54V (settable in user interface) | |
| Controller Self Consumption | 3.5W Typical | |
| Enclosure Type | ENC-STL-24x24x16 Pole/Wall Mount, Powder Coat Steel | ENC-AL-65x18x20 Ground Mount, Diamond Plate Aluminum |
| Enclosure Size | 23.9 x 23.9 x 16.1" (608 x 608 x 409.5mm) | 65 x 18 x 20" (1651 x 457 x 508mm) |
| Internal Mount Features | DIN Rail/Flat Plate Mounting Brackets Welded to Door and Back | |
| Solar Panel Dims (L x W x T) | 340W Solar Array 62" x 54" x 1.4" (1575 x 1372 x 35mm) 720W Solar Array 78 x 77 x 1.6" (1980 x 1956 x 40mm) | |
| Operating Temperature | -30°C to +60°C (-22°F to 140°F) | |
| System Weight (no batteries) | 136 lb (62 kg) 340W System 377 lb (171 kg) 720W System | 394 lb (179 kg) 720W System |
| Battery Weight | 40.3 lb (18.3 kg) (Each 50Ah Battery) | 127 lb (57.6 kg) (Each 180Ah Battery) |
| Wind Speed Rating | 90MPH | |
| Warranty | 3 Years | |



TPDIN-SC48-20 MPPT
Controller with manageable 7
Port Gigabit PoE Switch



RPSTL Enclosure interior
without batteries or controller



RPAL Diamond Plate Aluminum Ground Mount



AGM 12V 52Ah Battery



AGM 12V 180Ah Battery

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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 |
|-----------------|-----------------------|-----------------|-----------------------|-------------------------------------------|---------------------------|-----------------|--------------------------|------------------|
| RPSTL48-400-340 | Large Steel | 48V | 400Ah | 74W | >32hrs | TPDIN-SC48-20 | 24/48V POE 24/48V Aux | 340W |
| RPSTL48-400-720 | Large Steel | 48V | 400Ah | 100W | >24hrs | TPDIN-SC48-20 | 24/48V POE 24/48V Aux | 720W |
| RPAL48-720-720 | Ground Mount Aluminum | 48V | 720Ah | 157W | >24hrs | TPDIN-SC48-20 | 24/48V POE 24/48V Aux | 720W |

Part Number Definition:

RPAL 48-720-720

Enclosure Type
STL – Large Steel
AL – Ground Mount Alum

Battery Volts, Ctrl Type
48 – 48V TPDIN

12V Battery Capacity
400 – 400Ah
720 – 720Ah
14 – 1.44KAh

Solar Panel Output
340 – 340 Watt
720 – 720 Watt



RPSTL 340W 4 Panel
Solar System



RPSTL 720W 2 Panel
Solar System

For further information contact:

Tyconsystems.com

