

"Making Solar Simple"

MADE IN USA

MAPPS SPECIFICATIONS

Photovoltaic Modules

- High Efficiency Crystalline Silicon
- Meet JPL Block V Durability Criteria
- Tempered Glass and Aluminum Frame
- Module Warranty up to 25 Years

Gel Cell Sealed Batteries

- Sealed Maintenance-Free

- Excellent Deep-Cycling Performance
- Immobilized Electrolyte, Non-Spillable
- Transports Easily and Safely

Charge/Load System Controller

- Field Proven High Efficiency Design
- Temperature Compensated Charging
- Low Voltage Load Disconnect
- Most Models UL Listed and FM Approved

Balance of System Components

- Weatherproof Battery/Controller Enclosure
- Heavy Duty Aluminum Mounting Structures
- Color-Coded, Pre-Cut Wiring Harness
- Easy-to-Follow Manual/System Schematics

Optional Equipment Specifications

Lighting Control

- Ten field adjustable lighting control options
- Manual

- Detects day and night using the PV array

DC/AC Inverter for 120 VAC Systems

- Pure Sine Wave 120 VAC Power
- Low Battery Cutout Protection
- Overload & overtemp protection

Optional Accessories

Frangible Couplings

- Designed for Aviation and Roadside Apps
- Omni-directional breakaway support system

Aluminum shelf and backpanel

- DIN RAIL for customer load (s)
- Polyphaser surge protection for radios

DC to DC Voltage Converters

- Prewired on backpanel
- 12-24, 24-12, 24-24, 48-24, 12-48, 48-12 and more available



**SOLAR
ELECTRIC
SUPPLY, INC.**

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MAPPS Remote Photovoltaic Power System Datasheet

Model Number: MAPPS 30-58-12

MAPPS Solar System Specifications

| | |
|--|---|
| Solar Array Wattage, Standard Test Conditions, STC | 30 W |
| Nominal System Voltage | 12 VDC |
| Battery System Storage, 100 hour rate | 58 Amp-Hrs |
| Battery Type | Sealed Lead Acid Gel |
| Solar Module Certifications | ETL Listed to UL 1703, Class I Division 2, Group A, B, C, D |
| Battery Enclosure Rating | NEMA 3R |
| MAPPS System Weight | 76.6 lbs |

MAPPS Upgrades

| | |
|----------------------------|--------------|
| Dusk/dawn Light Controller | Not Included |
| Frangible Coupling | Not Included |
| Radio Shelf | Not Included |

MAPPS System Electrical Specifications

| | |
|--|----------|
| Solar Array Max Power Current, Imp | 1.78 A |
| Solar Array Short Circuit Current, Isc | 1.9 A |
| Solar Array Vmp | 16.8 VDC |
| Solar Array Voc | 21.0 VDC |
| Solar Temperature Coefficient (Voc/°C) | -0.360% |
| Solar Charge Controller Amp Rating | 10.0 A |
| Solar Charge Controller Voltage | 12 VDC |
| Optional Dc to AC Sine Wave Inverter Wattage | N/A |
| Optional Dc to AC Sine Wave Inverter Nom. DC Voltage | N/A |

MAPPS Solar Array Mechanical Specifications

| | |
|---|----------------------|
| Solar Array Total Area | 3.21 sq.ft (0.3sq.m) |
| Solar Array & Mounting Structure Total Weight | 14.6 lbs |
| Solar Mounting Structure Mounting Method | Side-of-Pole |
| Solar Mounting Structure Wind Speed Rating | 90 MPH |
| Solar Mounting Structure Material | Milled Aluminum |

MAPPS Battery and Equipment Enclosure

| | |
|-------------------------|---|
| Mounting Method | Standard Pole Mount |
| Material | Milled Aluminum |
| Enclosure Finish | Glossy Urethane Enamel White |
| Dimensions (LxWxH) | 18 in. x 16 in. x 10.8 in. (1.68 m x 1.49 m x 1.01 m) |
| Weight (with Batteries) | 62 lbs |

MAPPS Optional Accessories

| | |
|--------------------------|----|
| Wind Speed Upgrade | No |
| Optional DC-DC Converter | No |