

"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 90-108-12

### MAPPS Solar System Specifications

Solar Array Wattage, Standard Test Conditions, STC	90 W
Nominal System Voltage	12 VDC
Battery System Storage, 100 hour rate	108 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	127 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	5.03 A
Solar Array Short Circuit Current, Isc	5.6 A
Solar Array Vmp	17.9 VDC
Solar Array Voc	22.2 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	6.97 sq.ft (0.65sq.m)
Solar Array & Mounting Structure Total Weight	32 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)	95 lbs

### MAPPS Optional Accessories

Wind Speed Upgrade	No
Optional DC-DC Converter	No

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