

"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 180-216-12

MAPPS Solar System Specifications

Solar Array Wattage, Standard Test Conditions, STC	180 W
Nominal System Voltage	12 VDC
Battery System Storage, 100 hour rate	216 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	229 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	10.06 A
Solar Array Short Circuit Current, Isc	11.2 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	20.0 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	13.94 sq.ft (1.3sq.m)
Solar Array & Mounting Structure Total Weight	54 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)	26.2 in. x 16.5 in. x 10.6 in. (2.44 m x 1.54 m x 0.99 m)
Weight (with Batteries)	175 lbs

MAPPS Optional Accessories

Wind Speed Upgrade	No
Optional DC-DC Converter	No