## **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
- 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 AppsOmni-directional breakaway support

#### 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



TOLL FREE (877)297-0014 DIRECT (831)462-8243 FAX (831)462-8246

# **MAPPS Remote Photovoltaic Power System Datasheet**

Model Number: MAPPS 50-99-12 C1D2

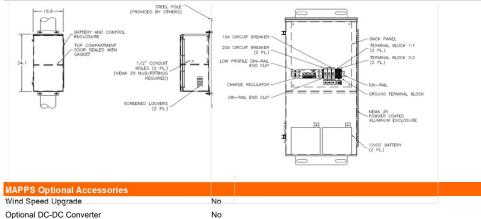
MAPPS Solar System Specifications	
Solar Array Wattage, Standard Test Conditions, STC	50 W
Nominal System Voltage	12 VDC
Battery System Storage, 100 hour rate	99 Amp-Hrs
Battery Type	Sealed Lead Acid Gel
Solar Module Certifications	ETL Listed to UL 1703, Class I Division 2, Group A, B, C, D
Battery Enclosure Rating	NEMA 4
MAPPS System Weight	121 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	2.9 A
Solar Array Short Circuit Current, Isc	3.2 A
Solar Array Vmp	17.5 VDC
Solar Array Voc	21.8 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	4.84 sq.ft (0.45sq.m)
Solar Array & Mounting Structure Total Weight	23 lbs
Solar Mounting Structure Mounting Method	Side-of-Pole
Solar Mounting Structure Wind Speed Rating	90 MPH

Milled Aluminum

**MAPPS Battery and Equipment Enclosure** Mounting Method Standard Pole Mount Material Powder-Coated Aluminum Enclosure Finish Glossy Urethane Enamel White Dimensions (LxWxH) 34 in. x 16.8 in. x 16 in. (3.16 m x 1.57 m x 1.49 m) Weight (with Batteries) 98 lbs



Optional DC-DC Converter

Solar Mounting Structure Material