



Solar®

**RPMS24 LFP Series**

**DATA SHEET**

## **MobileSolarPro® LFP**

### **Features**

- **Low Cost Complete Mobile Solar Remote Power Solution** for Off-Grid operation. Fully Assembled. Sets up in minutes.
- **Weatherproof Outdoor Locking Enclosure** with Wide Temp LiFePO4 Lithium Batteries. Thermostatically Controlled Ventilation.
- **Up to 1440W Solar Capacity** – Supports up to 315W continuous power with 6 Hrs. Peak Sun. Heavy Duty galvanized 360° adjustable solar mount with 10-65deg tilt. 25Year Solar Panel Warranty.
- **MPPT Temperature Compensated Solar Charge Controller**: 60A Solar, 30A Load, 99% Efficiency.
- **Complete Remote Monitoring and Control** – Email Alerts and Manual/Automatic Reboot. Monitor Solar Voltage & Current, Battery Voltage & Current, Load Current, Temperature. Disconnect Load Power.
- **Pneumatic Four Position (9ft, 12ft, 15ft, 18ft) Locking Aluminum Extension Mast** for up to 110lb load. Raises fully in about 90 seconds using the integrated air pump.
- **Regulated 12VDC, 56VDC and Un-regulated 24VDC Output at Top of Mast**. Includes surge protected Gigabit 5 port PoE Layer 2 Switch with one 90W 802.3bt PoE Port, three 802.3at PoE+ Ports and one 24V Passive PoE Port, all at top of pole. Dual CAT5 connections between top of mast and battery enclosure.
- **Protected and Secured Wiring** to deter vandals.
- **Dual Charging. Convenient Backup Generator or Grid Power Port**. Charge batteries using solar or AC power.
- **Locking 2" Ball Hitch Tongue Lock**. Four spring actuated extending (36" Max) support jacks.
- **Room for Second Enclosure on Most Models** for tool storage or additional battery capacity.
- **Chrome Wheels, Leaf Spring Suspension, Aluminum Diamond Plate Decking, Powder Coated Welded Steel Tube Construction**.
- **Solar Panel Cover and Ratchet Straps** for secure travel protection, Included.
- **Options**: Tycon BreezePro® Wind Turbine Kit, 2nd frame mounted aluminum enclosure, light kit, guy line kit, ground anchor kit, second battery bank and larger solar array.



\*Truck not included 😊

### **Applications**

- Construction Sites
- Surveillance Cameras
- Concerts and Festivals
- Temporary Security
- Off Grid Power
- Parking Lots
- Temporary Remote Lighting
- Emergency Power
- Agriculture

### **Specifications**

<b>Batteries</b>	
Battery Voltage	24VDC

<b>Battery Type</b>	Wide Temp LiFePO4 Lithium
<b>Battery Life</b>	10+years
<b>Solar Panels</b>	
<b>Type</b>	24VDC 360W, Monocrystalline 72 Cell Modules, 25year Life
<b>Solar Controller</b>	
<b>Type</b>	MPPT – Temperature Compensated, 60A Solar Input, 30A Load Output
<b>Self Consumption</b>	<1W
<b>Overcharge Protect</b>	32V
<b>Equalize Charge</b>	29.2V
<b>Bulk Charge</b>	28.8V
<b>Float Charge</b>	27.6V
<b>Over-discharge protect</b>	22V
<b>Over-discharge recover</b>	24V
<b>Remote Access</b>	Ethernet via TPDIN3 Monitor WiFi – Internet connected router req'd Mobile – Cellular router with carrier account SIM req'd
<b>AC Charging</b>	
<b>Input</b>	110/240VAC (Switchable), 50/60Hz, 10A
<b>Remote Monitoring</b>	
<b>Type</b>	Web Based, SNMP, 4 Channel
<b>Parameters Monitored</b>	Solar Panel Volts and Current, Battery Volts and Current, Load Current, Temperature
<b>Controls</b>	Connect / Disconnect Load Output, manually or automated based on programmable rules.
<b>Alerts</b>	Email alerts based on user programmable rules

<b>Extension Mast</b>	
<b>Type</b>	Pneumatic Locking Aluminum
<b>Lock Positions (4)</b>	9', 12', 15', 18' (2.74, 3.66, 4.57, 5.49m)
<b>Time to full extension</b>	90 seconds Typ (using included integrated air pump)
<b>Top Mounting Area</b>	36" x 2.1" diameter (914 x 53mm)
<b>Top of Mast Enclosure</b>	
<b>Type</b>	Aluminum Die Cast
<b>Interior Size</b>	10 x 7.75 x 3" (254 x 197 x 76mm)
<b>Voltages Available (16AWG Wire)</b>	12VDC 15A Regulated, 56VDC 5A Regulated, 24VDC 15A Unregulated
<b>PoE Ports</b>	5 Port Layer 2 Gigabit PoE Switch Port 1 = 90W 802.3bt PoE Port 2-4 = 802.3at 30W PoE+ Port 5 = 24VDC 12W Passive PoE
<b>Equipment Enclosure</b>	
<b>Type</b>	Vented Locking Aluminum Diamond Plate
<b>Internal Size</b>	64.5" x 17.5" x 19.5" (1638 x 444 x 495mm)
<b>Voltages Available Inside Enclosure</b>	56VDC 5A Regulated, 24VDC 30A Un-Regulated, 12VDC 20A Regulated
<b>Mobile Trailer</b>	
<b>Construction</b>	Welded Tubular Steel, Powder Coat Painted. Aluminum diamond plate decking.
<b>Frame Length</b>	Mini: 120" (3m) Standard: 130" (3.3m)
<b>Frame Width</b>	Mini: 72" (1.8m) Standard: 84" (2.1m)
<b>Deck Size</b>	Mini: 52 x 85.5" (1.3m x 2.2m) Standard: 77 x 86.5" (2m x 2.2m)
<b>Tongue</b>	Length: 48.5" (1232mm) ; Weight <200lb (91kg)
<b>Ball Size</b>	2" (50.8mm)
<b>Ground Clearance</b>	13" (330mm)
<b>Solar Panel Height</b>	63" above deck (1600mm)
<b>Wheels</b>	15" (381mm) Polished Aluminum
<b>Suspension</b>	Leaf Spring, 3500lb Axle
<b>Stabilizing Lifts (4)</b>	2000lb (907kg), 3 Position Extension: 0", 15" 36" (0, 381, 914mm)
<b>Misc</b>	
<b>Operating Temp</b>	-22°F to 140°F (-30°C to +60°C)
<b>Wind Speed Rating</b>	90 MPH (40 m/sec)
<b>Warranty</b>	3 Years

## System Ordering:

Model #	Frame Type	Solar Panel Output	Solar Array Size	Battery Capacity	Continuous Power Generation*	Reserve Time	Grid Charge Time*	Trailer Weight
RPMS24-800L-MINI	Mini	720W	79 x 77"	800Ah	157W	45hr	8hr	1340lb
RPMS24-800L-MINI-3P	Mini	1080W	119 x 77"	800Ah	235W	30hr	8hr	1400lb
RPMS24-1200L-MINI-3P	Mini	1080W	119 x 77"	1200Ah	235W	45hr	12hr	1540lb
RPMS24-1600L-MINI	Mini	720W	79 x 77"	1600Ah	157W	90hr	16hr	1550lb
RPMS24-1600L-MINI-3P	Mini	1080W	119 x 77"	1600Ah	235W	60hr	16hr	1600lb
RPMS24-1600L-BEAST	Standard	1440W	79 x 154"	1600Ah	315W	45hr	16hr	1800lb

\*6hrs peak sun

\*@50%  
discharge

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