# REMOTE SOLAR MANAGER

MONTORING SYSTEM WITH BUILT-IN OPTIMIZATION AND ANALYTICS

ELIMINATE TECHNICAL ROLLOUTS AND END REMOTE SOLAR POWER SYSTEM FAILURE GUESSWORK WITH THE FREEWAVE SOLAR MANAGER.

#### END UPTIME UNPREDICTABILITY

A significant cost in maintaining a solar system is countless site visits to replace batteries or service personnel investigating unknown problems. Understanding why a system is failing has been a bit of an anomoly. Designing solar systems can be tricky, as well. Now, you can eliminate the guesswork for your remote solar powered system from design to power loads to forecasting failures.

#### PAYS FOR ITSELF, SAVES RESOURCES

Your field personnel can save hours no longer having to visit a solar site location just to reset power on the equipment that has locked up for unknown reasons or to determine why the solar powered system abruptly failed without notice. With the ability to remotely cycle power and prioritize load shedding, you save money while your field personnel can focus on more important tasks.

#### **REAL-TIME, AUTOMATED PREDICTIONS**

Real-time, dynamic, automated system predictions are at your fingertips with the comprehensive dashboard and data presentation. Providing detailed system information on the proper solar panel and battery size to maintain power across a specified number of days of no or low solar exposure helps to reduce costly service calls by alerting SCADA opeartors of the needed battery and solar capacity to add and when to replace batteries and any forecasted system failures.

#### PUTS AN END TO UNKNOWN PERFORMANCE

Monitoring, optimizing and analytics are now in your control for all of your remote, off-grid installations.







#### **KEY PREDICTION ANALYSIS**

CALCULATION	FEATURES
Panel Size	Auto calculates and displays the required and proper panel size your system will need to completely charge the system batteries.
Battery Size	Auto calculates and displays the required and proper battery size in AMPHOURS your system will need to sustain load requirements.
Sunshine Exposure	Auto calculates number of hours the system solar panel has been effective within 24-hour timeframe.
Battery Aging	Automatically tracks charging history and warns when to replace batteries. Detects battery not holding a charge or bad battery
Charging Pattern	Automatically determines charging patterns inconsistent with proper charging.

#### LOAD SHEDDING LIMITS

SETTINGS	LOW LIMIT < SHED VDC	RESTART > LIMIT
LOAD1 Shed Voltage	11.60v	12.20v
	23.20v	24.40v
LOAD2 Shed Voltage	11.80v	12.20v
	23.60v	24.40v

#### **MODEL MPPT RTU 20A-702/218**

MODBUS RTU CHARGING CONTROL

#### **MODEL MPPT IP 20A-702/218**

MODBUS TCP CHARGING CONTROL MQTT SNMP WEB PAGE	
SOLAR MIN/MAX VDC	6VDC/50VDC
BATT MIN/MAX VDC	14VDC/28VDC
MAX LOAD 1&2 AMPS/EA	8 AMPS
MAX SYSTEM AMPS	20 AMPS
TEMPERATURE	-20 TO +70 C

All specifications are subject to change without notice.

## FREEWAVE

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### For more information, please visit WWW.FREEWAVE.COM

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