

# WorldGSM™ Power Cube-500M

## TELECOM GRADE POWER SYSTEM

- Optimized for Solar and AC Operations
- Remotely Managed
- Outdoor Design
- +/- 48V Supply Voltage



# WorldGSM™ Power Cube-500M

## DETAILS

### OVERVIEW

R4 Power Cube-500M is a compact, integrated and telecom grade power system, suitable with both solar and mains operations.

It comes in industry standard rack based installation. The system can intelligently monitor and regulate charging/ discharging of batteries. The unit is remotely managed.

It can be used to power DC load up to 500 W with redundant mode. It can extend alarms & control of external devices to central OMC.

### FEATURES

- Fault detection and recovery for carrier grade performance
- Protection against short circuit, overload and over voltage
- Intelligent monitoring of critical operational parameters.
- Smart charging & discharging
- Works without Air conditioning
- Passive cooling for Solar operations
- External Alarm & control extension to central OMC.

### HIGHLIGHTS

- *Simple Installation*
- *Easy to Operate*
- *Enhanced Service Availability with Redundant Design*
- *Local and Central Fault Reporting*
- *Enhanced Battery Life with Temperature Compensated Charging and Protection Against Overcharge & Deep Discharge*
- *Outdoor Design*
- *Remote Software Management*

# WorldGSM™ Power Cube-500M

## SPECIFICATIONS

SYSTEM	SHPS-500	SSPS-500
Type	Outdoor	
Power Modules	Dual, Redundant, Hot-Swappable	
<b>AC INPUT</b>		
Voltage	90VAC to 300VAC	-
Frequency	48 Hz to 60 Hz	-
Peak Input AC Power	7,500VA	-
Under Voltage & Over Voltage Protection	Yes	-
<b>DC INPUT</b>		
Solar Input Ports	4	
Solar Input Current per Port	25A Max.	
Solar Input Voltage	60V Max.	
Battery Ports	2	
Battery Voltage	56.4 V Max.	
Battery Current per Port	60A Max.	
<b>DC OUTPUT</b>		
DC Output Port	2	
DC Output Voltage	±48V (44.4 to 56.4V)	
BTS Current Rating	10A Max.	
Backhaul Current Rating	2A Max.	
<b>SMPS</b>		
Modules	2	-
Rated input AC Power per Module	1750 VA	-
Output Voltage	42 - 56.4V Max.	-
Output Current per Module	25A	-
LED Indications	AC In, Fan Fail, Load Status, SMPS Fault	-
<b>USER INTERFACE</b>		
RS485 Port	Isolated Half Duplex	
Optical Port	2	
10/100 Mbps Standard Ethernet Port	4 x Standard RJ45	
10/100 Mbps Standard Ethernet Switch with Configurable 48 V PoE	1 Port	
LED Indications	Power System Status	
Alarm & Indications	Interfaces to OMC, Alarm and Display Unit over Ethernet for Alarm & Indicators Display and System Info.	

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## SPECIFICATIONS

MPPT SYSTEM	SHPS-500	SSPS-500
Type	Outdoor	
Solar Panels supported	6 Max.	
Output port	1	
Output Voltage	48-56.2 V	
Max Output Power	1800W	
Ingress Protection Level	IP 55	
MPPT USER INTERFACE		
RS485	Available	
Reset button	Available	
Indication LEDs	Available	
Audio Indication	Available	
ENVIRONMENTAL & SAFETY		
Temperature Range (Full Performance)	-15° C to 55° C (5° F to 131° F)	
Storage Temperature	-20° C to 60° C (-4° F to 140° F)	
Relative Humidity	15% to 100%	
Safety	IEC 60950	
EMI/EMC	complies with Class A of EN 55022, IEC61000-4-2 for ESD IEC61000-4-3 for Radiated RF Immunity IEC61000-4-4 for EFT IEC61000-4-5-04 for Surge Immunity IEC 61000-4-6 for Conducted RF Immunity	
Ingress Protection Level	Battery Cabinet: IEC 60529 Standard, IP44 Level	
	IP55	
Mechanical	ETSI EN 300 019-1-2 Class 2.3 Public Transportation QM 333cat B2	

## ABOUT VNL

VNL makes WorldGSM™, a complete GSM and Broadband Solution that helps mobile operators reach rural markets profitably. It is completely solar powered and optimized for rural markets. For the first time, mobile operators can build profitable businesses serving low-ARPU users in rural and remote communities.

**The microtelecom revolution is ready to begin and VNL is leading the charge.**

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