

# BULLET SOLAR MPPT PCU

**SO SMART  
SO POWERFUL  
SO RELIABLE,  
YOU COULD SAY IT'S**



**BULLET 3024**



**BULLET 3524**

## THE SHAKTIMAAN OF SOLAR INVERTERS



### RUNS HEAVY LOAD

Engineered for maximum power, it powers a 1 HP motor pump with the 3024 model and effortlessly handles a 1.5T Inverter AC with the 3524.



### LI ION FAST CHARGE

Lithium charging profile selectable, and rapid battery charging from  
Solar | Grid :  
70A | 18A : 3024  
100A | 30A : 3524



### MORE POWER

Can connect to more panels now with higher MPPT Wattage:  
2200 W : 3024  
3000 W : 3524



### SMART MODES

Multiple Modes of operation to maximise PV generation and help you become an independent energy user



### ALL METAL BODY

Full Heavy metal body, acts as armour and gives you long product life

# BULLET SOLAR MPPT PCU



## TECHNICAL SPECIFICATION

PARAMETER	RATINGS	
Model Number/Name	BULLET 3024	BULLET 3524
Nominal DC Voltage	24V / 25.6V FOR LITHIUM	
<b>MPPT CHARGER</b>		
Type of Charger	MPPT	
No of MPPT Channels	One	
Switching Element	IGBT	
Max. Connected PV Modules	2200 Watts	3000 Watts
Max MPPT Output Current/ Max Battery Charging Current	70 Amps	100 Amps
Max. Open Circuit PV Voltage	110 V	
MPPT Voltage Range	35-88 Volts	
Max. Input PV Current	40 Amps	50 Amps
MPPT Peak Efficiency	94%	92%
<b>SOLAR INVERTER</b>		
Input Power at Peak Load	2200 Watts	3000 Watts
Switching Element	MOSFET	
Nominal Output Voltage	220 V	
Nominal Output Frequency	50 Hz	
Output Voltage Range (At nominal Battery Volts)	180-220 Volts	
Max. Output Nominal Current	8 Amps	9.5 Amps
Overloads	100-125% (120 Seconds), 126-150% (60 Seconds), 151-200% (5 Seconds), > 200% (Immediate)	
Overload Restart (Not applicable for UPS Mode)	3 Times Auto Restart and then Manual Reset	
Controller Type	DSP Based	
Output Type	Pure Sine Wave	
Input Source	PV/ Battery/Grid	
Peak Inverter Efficiency	>85%	
Total Harmonic Distortion	less than 5 %	
Changeover Time in UPS Mode	less than 15 msec	
Changeover Time in Wide Range Mode	less than 25 msec	
No Load Losses	1.5 Amps	2.0 Amps
UPS Mode (for IT Loads)	Provided	
Wide Grid Operation Mode (for Non IT Loads)	Provided	
<b>BATTERY</b>		
Wake up circuit	Included	
Battery Under Cut Alarm	22.2 V (Auto Adjustable)/LITHIUM 24.2V(Settable)	
Battery Under Cut	21.6 V (Auto Adjustable)/LITHIUM 24.0V (Settable)	
Float Charging Voltage (Factory Settable)	26.4V (Tubular)/ 27V (SMF)/ 26.8V (Flat Plate)/LITHIUM 28.8V	
Boost Charging Voltage (Factory Settable)	29.4 (Tubular)/ 27.6V (SMF)/ 27.4V (Flat Plate)/ (LITHIUM 28.8V)	
<b>GRID CHARGER</b>		
Grid Operating Voltage Range (W-UPS Mode)	120-280 Volts (+/- 10V)	
Grid Under Cut Recovery Voltage (W-UPS Mode)	135 Volts (+/- 5V)	
Grid Over Cut Recovery Voltage (W-UPS Mode)	265 Volts (+/- 5V)	
Grid Operating Voltage Range (UPS Mode)	180-260 Volts (+/- 10V)	
Grid Under Cut Recovery Voltage (UPS Mode)	195 Volts (+/- 5V)	
Grid Over Cut Recovery Voltage (UPS Mode)	245 Volts (+/- 5V)	
Grid Input Frequency Range	47-53 Hz	
Max Battery Charging Current from Grid	18 Amps (settable)	30 Amps (settable)
Input Source Supported	Grid/ Generator	
<b>DISPLAY/PROTECTIONS/INDICATIONS</b>		
Protections	<b>PV:</b> Reverse Polarity, Battery Reverse Power, PV Power Limit <b>Battery:</b> Under Voltage Cut, Over Voltage Cut, Reverse Polarity, Overcharge Limit (BCL), Battery Fuse <b>Grid:</b> Over Voltage, Under Voltage, Over Frequency, Under Frequency, Grid Fuse Fail <b>Load:</b> Overload, Short Circuit, Over Heat, Output Low, Grid Back Feed, Prevent Ph to Ph condition Grid Supply	
Display Parameters	<b>PV:</b> Voltage, Amps, Power, Today KWH, Total KWH Generation., <b>Battery:</b> Voltage, Amps, Charge/ Discharge Status <b>Grid:</b> Voltage, Frequency, Load: Voltage, Load %, Frequency. <b>System:</b> Operating Modes (UPS/ Wide Range), Priority Selection, Grid Charging Enable/ Disable, Battery Status (Charging/ Discharging) <b>Start Up:</b> WELCOME, Firmware versions	
Display Faults	<b>PV:</b> PV Over Voltage <b>Battery:</b> Battery Under Voltage, Battery Over Voltage <b>Grid:</b> Back Feed, Under/ Over Voltage, Fuse Fail <b>Load:</b> Overload, O/P Short Circuit <b>System:</b> Over Temperature	
Audio Buzzer	Overloads, Short Circuit, Low Battery Alarm, Battery Under Cut, Change in Grid Status (Beep), Grid Fuse fail, PV Over Voltage, Grid Over Voltage	
Front Panel LED	Power ON, Inverter ON, SPV Present/ SPV Charging, Grid Present/ Grid Charging, Battery Under Cut/ Alarm, Fault	
Front Panel Switches	Reset for System ON/OFF, UP, DOWN, BACK, ENTER	
Display Type	16 x 2 Alpha Numeric Display with Backlight	
<b>ENVIRONMENT</b>		
Operating Temperature	0-50 degrees Ambient	
Max Relative Humidity @25°C (non Condensing)	95%	
Degree of Protection	IP20	
Dimensions (LxWxH)	415X357X160 (in mm)	475X400X185 (in mm)

\*Specifications are subject to change without prior notice due to constant improvement in design and technology

