



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



MICROMAK RENEWABLE ENERGY

TECHNICAL SPECIFICATION

PARAMETER		RATINGS	
Model Number/Name	BULLET 3024		BULLET 3524
Nominal DC Voltage	24V / 25.6V FOR LITHIUM		
MPPT CHARGER			
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%	
SOLAR INVERTER			
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		
BATTERY			
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)		
GRID CHARGER			
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		
DISPLAY/PROTECTIONS/INDICATIONS			
Protections	PV: Reverse Polarity, Battery Reverse Power, PV Power Limit Battery: Under Voltage Cut, Over Voltage Cut, Reverse Polarity, Overcharge Limit (BCL), Battery Fuse Grid: Over Voltage, Under Voltage, Over Frequency, Under Frequency, Grid Fuse Fail Load: Overload, Short Circuit, Over Heat, Output Low, Grid Back Feed, Prevent Ph to Ph condition Grid Supply		
Display Parameters	PV: Voltage, Amps, Power,Today KWH, Total KWH Generation., Battery: Voltage, Amps, Charge/ Discharge Status Grid: Voltage, Frequency,Load: Voltage, Load %, Frequency. System: Operating Modes (UPS/ Wide Range), Priority Selection, Grid Charging Enable/ Disable, Battery Status (Charging/ Discharging) Start Up: WELCOME, Firmware versions		
Display Faults	PV: PV Over Voltage Battery: Battery Under Voltage, Battery Over Voltage Grid: Back Feed, Under/ Over Voltage ,Fuse Fail Load: Overload, O/P Short Circuit System: 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		
ENVIRONMENT			
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			