

BLUE MOUNTAIN ENERGY

Hybrid Solar Inverter



Hybrid Solar Inverter

BME-20 / BME-30

Features

- Pure sine wave output
- Self-consumption and Feed-in to the grid
- Programmable supply priority for PV, Battery or Grid
- True galvanic isolation transformer design
- User-adjustable charging current
- Programmable multiple operation modes: Grid-tie, off-grid and grid-tie with backup
- Built-in timer for various mode of on/off operation
- Multiple communication for USB, RS-232, Modbus and SNMP
- Monitoring software for real-time status display and control
- Parallel operation up to 4 units only for 30KW



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SPECIFICATIONS

MAXIMUM PV INPUT POWER	30KW	45KW
RATED OUTPUT POWER	20KW	30KW
MAXIMUM CHARGING POWER	20KW	30KW

GRID-TIE OPERATION

PV INPUT (DC)		
Nominal DC Voltage / Maximum DC Voltage	720 VDC / 950 VDC	
Start-up Voltage / Initial Feeding Voltage	500 VDC / 550 VDC	
MPP Voltage Range	460 VDC - 900 VDC	
Full power MPP Voltage Range	625 VDC - 900 VDC	
Number of MPP Trackers / Maximum Input Current	1 / 48A	1 / 72A

GRID OUTPUT (AC)

Nominal Output Voltage	230 VAC* (P-N) / 400 VAC (P-P)	
Output Voltage Range	195.5 - 253 VAC per phase	
Output Frequency Range	49 - 51 Hz or 59.3 - 60.5 Hz	
Nominal Output Current	29.0 A per phase	43.5 A per phase
Power Factor	> 0.99	1

EFFICIENCY

Maximum Conversion Efficiency (DC/AC)	93%	95%
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OFF-GRID OPERATION

AC INPUT		
AC Start-up Voltage/Auto Restart Voltage	120 - 140 VAC per phase / 180 VAC per phase	150 - 170 VAC per phase / 180 VAC per phase
Acceptable Input Voltage Range	170 - 280 VAC per phase	
Maximum AC Input Current	40 A per phase	43.5 A per phase

PV INPUT (DC)

Maximum DC Power / Maximum DC Voltage	30KW / 950 VDC	45KW / 950 VDC
MPP Voltage Range	550 VDC - 900 VDC	460 VDC - 900 VDC
Number of MPP Trackers / Maximum Input Current	1 / 48 A	1 / 72 A

BATTERY MODE OUTPUT (AC)

Nominal Output Voltage	230 VAC (P-N) / 400 VAC (P-P)	
Output Waveform	Pure Sinewave	
Efficiency (DC to AC)	>91%	

HYBRID OPERATION

PV INPUT (DC)		
Nominal DC Voltage / Maximum DC Voltage	720 VDC / 950 VDC	
Start-up Voltage / Initial Feeding Voltage	500 VDC / 550 VDC	
MPP Voltage Range	550 VDC - 900 VDC	460 VDC - 900 VDC
Number of MPP Trackers / Maximum Input Current	1 / 48 A	1 / 72 A

GRID OUTPUT (AC)

Nominal Output Voltage	230 VAC* (P-N) / 400 VAC (P-P)	
Output Voltage Range	184 - 265 VAC per phase	195.5 - 253 VAC per phase
Output Frequency Range	47.5 - 51.5 Hz or 59.3 - 60.5 Hz	49 - 51 Hz or 59.3 - 60.5 Hz
Nominal Output Current	29 A per phase	43.5 A per phase
Power Factor	> 0.99	1

AC INPUT

AC Start-up Voltage / Auto Restart Voltage	120 - 140 VAC per phase / 180 VAC per phase	150 - 170 VAC per phase / 180 VAC per phase
Acceptable Input Voltage Range	170 - 280 VAC per phase	
Maximum AC Input Current	40 A per phase	43.5 A per phase

BATTERY MODE OUTPUT (AC)

Nominal Output Voltage	230 VAC (P-N) / 400 VAC (P-P)	
Efficiency (DC to AC)	>91%	

BATTERY & CHARGER

Nominal Battery Voltage/Charging Voltage Range	384VDC / 384VDC - 480VDC	
Battery Operating Voltage Range	320VDC - 512VDC	
Maximum Charging Current	50A	80A

GENERAL

PHYSICAL		
Dimension, D x W x H (mm)	559 x 320 x 909	430 x 715 x 1021
Net Weight (kgs)	120	223

INTERFACE

Communication Port	RS-232/USB
Intelligent Slot	Optional SNMP, GPRS, WIFI, Modbus cards available

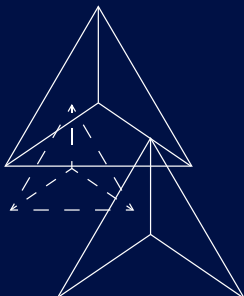
ENVIRONMENT

Humidity	0 - 90% RH (Non-Condensing)
Operating Temperature	-10 to 55°C
Altitude	0 - 1000 m**

*These figures are based on VDE-4105 standard. All figures may vary depending on different AC voltage and country requirements.

** Power derating 1% every 100 m when altitude is over 1000m

Product specifications are subject to change without further notice.



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For further information visit www.bluemountainpv.com

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