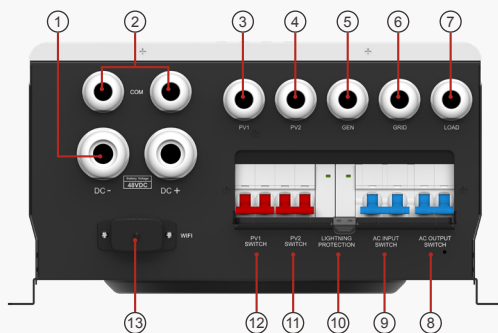




Back panel description



12KW | 250V | 200A

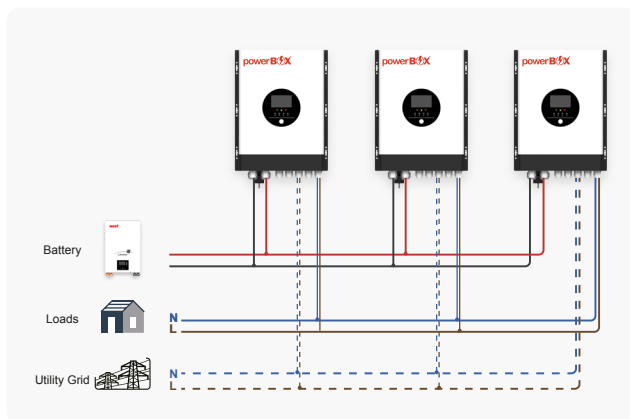
PBM12048 series is a multi-function inverter, combining functions of inverter and MPPT solar charge controller, solar charger and battery charger to offer uninterruptible power support. The comprehensive LCD display offers user-configurable and easy-accessible button operation such as battery charging current, AC/solar charger priority, and selectable input voltage based on different applications.



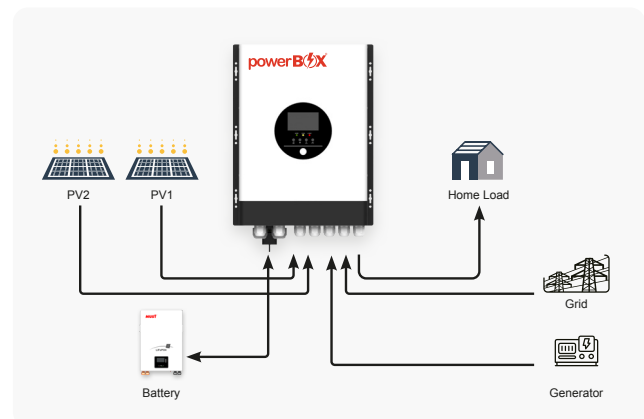
- Smart LCD setting (Working modes, Charge Current, Charge voltage, etc.)
- Built-in MPPT solar charge controller 200A
- MPPT efficiency max 98%
- Powerful charge rate up to 200A
- Inside BMS function
- DC start & Automatic Self-Diagnostic Function
- WIFI monitoring function (optional)
- Compatible to generator
- Parallel operation with up to 3 units

- | | |
|-----------------------|--------------------------|
| 1. Battery +/- | 8. AC output switch |
| 2. Communication port | 9. AC input switch |
| 3. PV input 1 | 10. Lightning protection |
| 4. PV input 2 | 11. PV2 Switch |
| 5. GEN port | 12. PV1 Switch |
| 6. Grid port | 13. WiFi port |
| 7. AC output | |

Parallel operation



Solar system connection



PBM-12048

Low Frequency

Solar inverter

Model	PBM-12048
Nominal Battery System Voltage	48VDC
Stand-alone mode	Yes
Parallel operation	3 units
INVERTER OUTPUT	
Rated power	12.0KW
Surge rating	36000VA
Capable of starting electric motor	6HP
Waveform	Pure sine wave / same as input (bypass mode)
Nominal output voltage RMS	100V/110V/120V/200V/220V/240V
Inverter efficiency(peak)	>90%
Line mode efficiency	>95%
Power factor	1.0
Typical transfer time	20ms(max)
AC INPUT	
Voltage	220V/230V/240V
Selectable voltage range	90-280 VAC (APL)
Frequency range	50Hz / 60Hz
BATTERY	
Low battery voltage cutoff	40-48VDC for 48VDC mode
Low battery voltage recover	42-50VDC for 48VDC mode
High battery voltage cutoff	60VDC for 48VDC mode
High battery voltage recover	57VDC for 48VDC mode
Idle consumption-search mode	<50W
AC CHARGER	
Output voltage	Depends on battery type (Supports lead-acid, gel, and lithium batteries)
Charger AC input breaker rating	100A
Overcharge protection S.D.	62.8VDC for 48VDC mode
Maximum charge current	10-140A (setting) battery terminal
BTS	
Continuous output power	Yes Variances in charging voltage & S.D. voltage base on the battery temperature
BYPASS & PROTECTION	
Input voltage waveform	Sine wave (grid or generator)
Nominal input frequency	50Hz or 60Hz
Overload protection (SMPS Load)	Software + Circuit breaker
Output short circuit protection	Software + Circuit breaker
Bypass breaker rating	63A
Max bypass current	80A
SOLAR CHARGER	
Maximum PV charge current	200A
DC voltage	48V
Maximim PV array power	10000W
MPPT range @ operating voltage(VDC)	64~235VDC
Maximum PV array open circuit voltage	250VDC
Maximum efficiency	>98%
Standby power consumption	<2W
MECHANICAL SPECIFICATIONS	
Mounting	Wall mount
Packing	Wooden box
Dimensions (W*H*D)	439*570*233mm
Package Dimensions (W*H*D)	690*214*520mm
N.W	42kg
G.W	47kg
Warranty	1years
OTHER	
Operation temperature range	0°C to 50°C
Storage temperature	15°C to 60°C
Audible noise	60dB MAX
Communication	WiFi
Display	LED+LCD
CERTIFICATION & STANDARDS	

CE-LVD (IEC62109-1:2010, EN IEC62109-2:2011); UL1741