


# Low Frequency Solar Inverter

## AM48 Solar Series (15KVA)





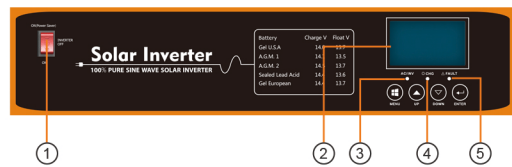
### Features

- Smart LCD setting(Working modes, Charge Current, Charge voltage, etc.)
- Built-in MPPT solar charge controller 100A/200A
- MPPT efficiency max 98%
- Powerful charge rate up to 140Amp
- DC start &Automatic Self-Diagnostic Function
- WIFI / USB monitoring function (wi-fi optional)
- Supporting AGS, BTS port
- Compatible to generator

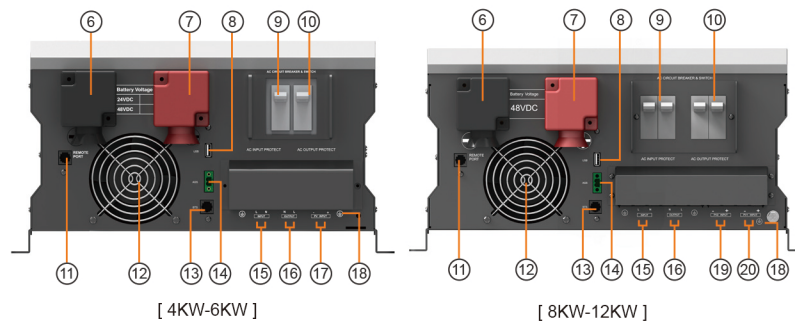
### Introduction

AM48 series is a multi-function inverter ,combining functions of inverter and MPPT solar charger controller, solar charger and battery charger to offer uninterrupted 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.

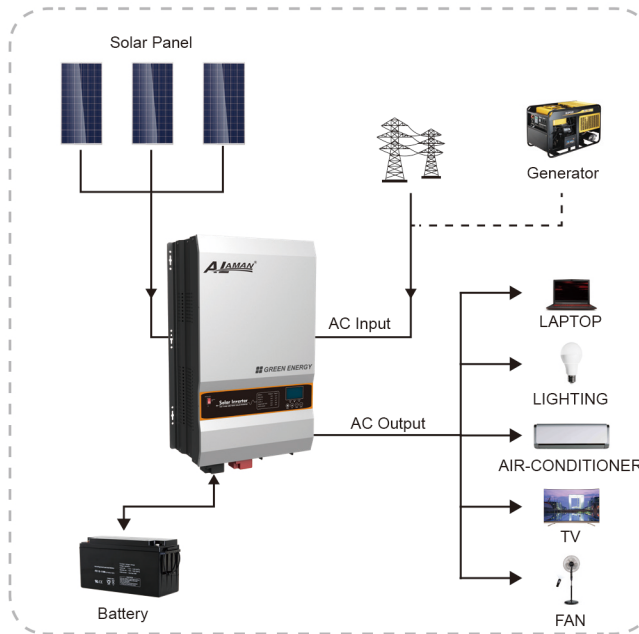
### Back panel printing description



- |                                |                          |
|--------------------------------|--------------------------|
| 1. Switch ON/OFF               | 11. Remote control port  |
| 2. LCD display                 | 12. Fan                  |
| 3. AC/Inverter indicator       | 13. BTS                  |
| 4. Charging indicator          | 14. AGS                  |
| 5. Fault indicator             | 15. AC input             |
| 6. BAT-                        | 16. AC output            |
| 7. BAT+                        | 17. PV input             |
| 8. WIFI/USB communication port | 18. Ground               |
| 9. AC input/Bypass breaker     | 19. PV2 input (optional) |
| 10. AC output breaker          | 20. PV1 input            |



### Solar system connection



### Specification

MODEL	AM48-15KVA Solar	
Nominal Battery System Voltage		
48VDC		
INVERTER OUTPUT	Rated power	15KVA/10KW
	Surge rating	30KVA
	Capable of starting electric motor	5HP
	Waveform	Pure sine wave / same as input (bypass mode)
	Nominal output voltage RMS	220V / 230V / 240VAC (±10%RMS)
	Output frequency	50Hz / 60Hz ± 0.3Hz
	Inverter efficiency(peak)	>88%
	Line mode efficiency	>95%
	Power factor	1.0
	Typical transfer time	20ms(max)
AC INPUT	Voltage	230VAC
	Selectable voltage range	90-280 VAC (APL)
	Frequency range	50Hz / 60Hz
BATTERY	Low battery voltage cutoff	20-24VDC for 24VDC mode (40-48VDC for 48VDC mode)
	Low battery voltage recover	21-25VDC for 24VDC mode (42-50VDC for 48VDC mode)
	High battery voltage cutoff	30VDC for 24VDC mode (60VDC for 48VDC mode)
	High battery voltage recover	28.5VDC for 24VDC mode (57VDC for 48VDC mode)
	Idle consumption-search mode	<80W when power saver on
AC CHARGER	Output voltage	Depends on battery type
	Charger AC input breaker rating	80A
	Overcharge protection S.D.	31.4VDC for 24VDC mode (62.8VDC for 48VDC mode )
	Maximum charge current	120A
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)	Circuit breaker
	Output short circuit protection	Circuit breaker
	Bypass breaker rating	63A
	Max bypass current	80Amp
SOLAR CHARGER	Maximum PV charge current	100A(200A optional)
	DC voltage	48V
	Maximim PV array power	5000W(10000W for 200A optional)
	MPPT range @ operating voltage(VDC)	64~145VDC
	Maximum PV array open circuit voltage	145VDC
	Maximum efficiency	>98%
	Standby power consumption	<2W
MECHANICAL SPECIFICATIONS	Mounting	Wall mount
	Dimensions (W*H*D)	670*410*215mm
	Net weight (solar CHG) (kg)	75.75+2.5
	Shipping dimensions (W*H*D)	884*618*443mm
	Shipping weight (Solar CHG) (kg)	89+2.5
	OTHER	Operation temperature range
	Storage temperature	-15°C to 60°C
	Audible noise	60dB MAX
	Display	LED+LCD
	Loading (20GP/40GP/40HQ)	140pcs / 280pcs / 320pcs