

# Low Frequency Solar Inverter

## PV3500 TLV Series (8KW-12KW)



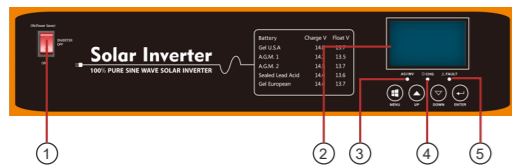
### Features

- Smart LCD setting(Working modes, Charge Current, Charge voltage, etc.)
- Built-in MPPT solar charge controller 100A
- MPPT efficiency max 98%
- Powerful charge rate up to 80Amp
- DC start &Automatic Self-Diagnostic Function
- USB monitoring function
- Supporting AGS, BTS port
- Compatible to generator

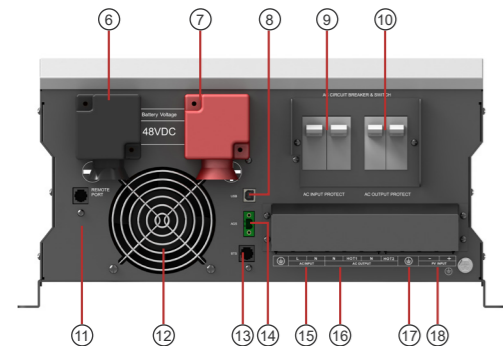
### Introduction

PV3500 TLV series is a multi-function inverter ,combining functions of inverter and MPPT solar charger 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.

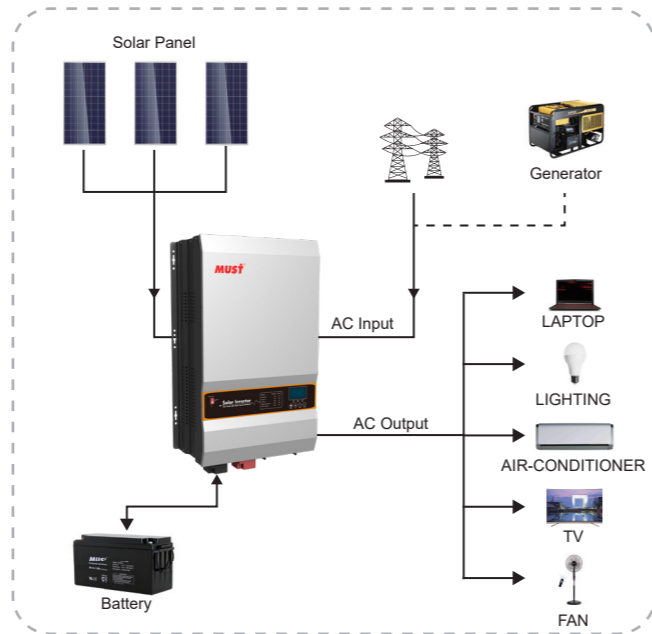
### Back panel printing description



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



### Solar system connection



### Specification

MODEL		PV35-8048 TLV	PV35-10048 TLV	PV35-12048 TLV
Nominal Battery System Voltage		48VDC	48VDC	48VDC
INVERTER OUTPUT	Rated power	8.0KW	10.0KW	12.0KW
	Surge rating	24000VA	30000VA	36000VA
	Capable of starting electric motor	4HP	5HP	6HP
	Waveform	Pure sine wave / same as input (bypass mode)		
	Nominal output voltage RMS	100V/110V/120V/200V/220V/240V		
	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	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	< 60W when power saver on		
AC CHARGER	Output voltage	Depends on battery type		
	Charger AC input breaker rating	80A	80A	80A
	Overcharge protection S.D.	31.4VDC for 24VDC mode (62.8VDC for 48VDC mode )		
	Maximum charge current	60A	70A	80A
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	63A	63A
SOLAR CHARGER	Max bypass current	80Amp		
	Maximum PV charge current	100A		
	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		
	Package Dimensions (W*H*D)	/		
OTHER	Operation temperature range	0°C to 40°C		
	Storage temperature	-15°C to 60°C		
	Audible noise	60dB MAX		
	Display	LED+LCD		
	Loading (20GP/40GP/40HQ)	140pcs / 280pcs / 320pcs		