

LOW FREQUENCY SPLIT PHASE SOLAR INVERTER

PV3900 TLV Series



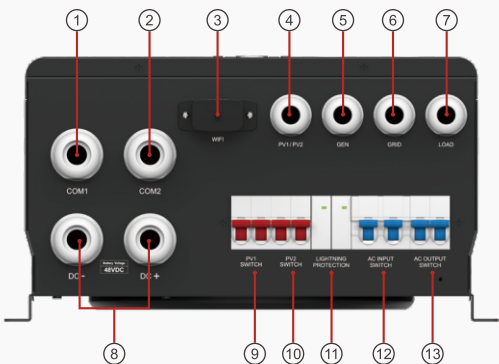
8~12KW | PV 250V | MPPT 200A

PV3900 TLV 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

Back panel description



1. Communication-1 port

2. Communication-2 port

3. WiFi port

4. PV1/PV2 port

5. GEN output port

6. Grid output port
7. AC ouput port

8. Battery -/+

9. PV1 Switch

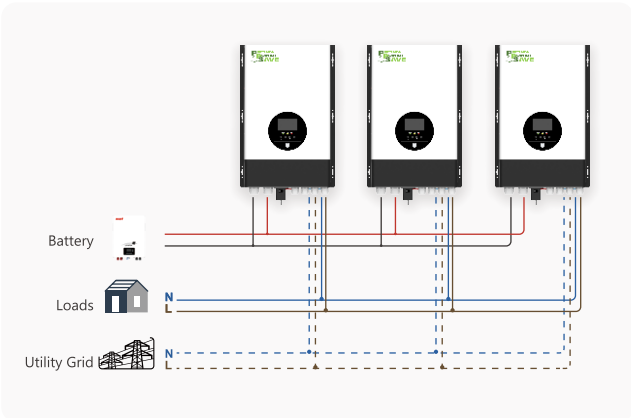
10. PV2 Switch

11. Lighting protection

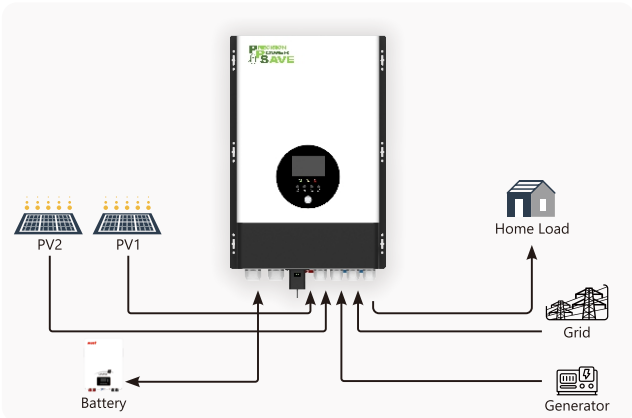
12. AC input switch

13. AC output switch

Parallel operation



Solar system connection



MODEL	PV39-8048 TLV		PV39-10048 TLV		PV39-12048 TLV	
Nominal Battery System Voltage	48VDC					
Stand-alone mode	Yes					
Parallel operation	3 units					
INVERTER OUTPUT						
Rated power	8KW		10KW		12KW	
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					
Inverter efficiency(peak)	>90%					
Line mode efficiency	>95%					
Power factor	1.0					
Typical transfer time	10ms(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					
No-load loss	<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		10000W		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					
Machine Dimension (W*H*D)(mm)	439*660.5*233.2					
Package Dimension (W*H*D)(mm)	782*314.5*520.5					
N.W(kg)	55		62		69	
G.W(kg)	73		80		87	
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					
Standard Warranty	2 year					
CERTIFICATION & STANDARDS						
CE-LVD (IEC62109-1:2010, EN IEC62109-2:2011); UL1741						