

LOW FREQUENCY SPLIT PHASE SOLAR INVERTER
PV3900 TLV Series

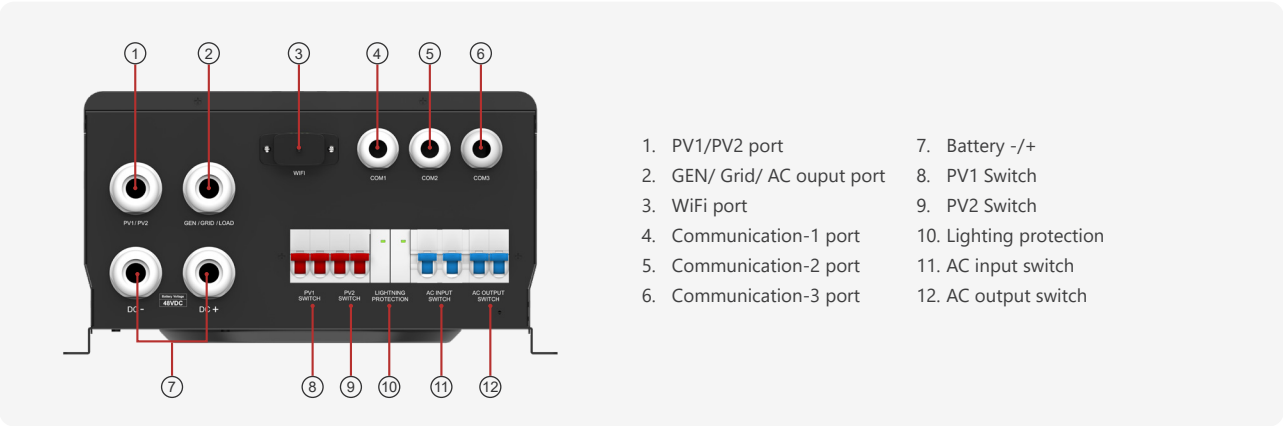
8~12KW | PV 250V | 100A/200A

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.

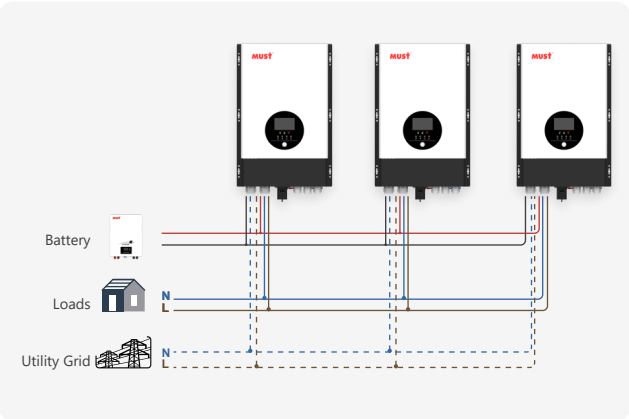


- Smart LCD setting(Working modes, Charge Current, Charge voltage, etc.)
- Built-in MPPT solar charge controller 200A
- MPPT efficiency max 98%
- Powerful charge rate up to 200A
- Inside BMS function
- DC start &Automatic Self-Diagnostic Function
- WIFI monitoring function (optional)
- Compatible to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

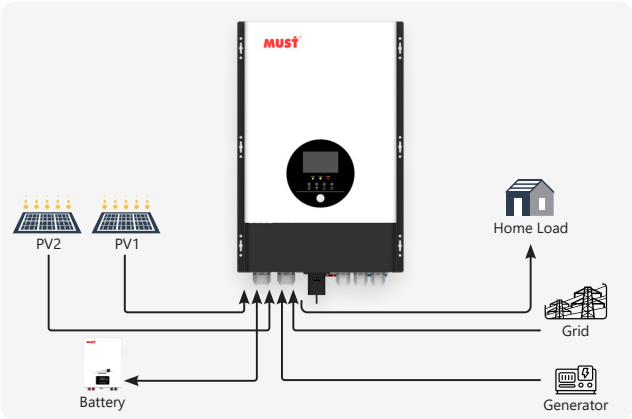
Back panel description



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	100A	200A	200A	
DC voltage	48V			
Maximim PV array power	5000W	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	2years			
CERTIFICATION & STANDARDS				
CE-LVD (IEC62109-1:2010, EN IEC62109-2:2011); UL1741				

*The technical specifications of this document are subject to change without any notice