

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 charger controller, solar charger and battery charger to offer uninterruptible power support. The comprehensive LCD display offers userconfigurable and easy-accessible button operation such as battery charging current, AC/solar charger priority, and selectable input voltage based on different applications.











■ Built-in MPPT solar charge controller 200A

■ MPPT efficiency max 98%

■ Powerful charge rate up to 200A

■ Inside BMS function

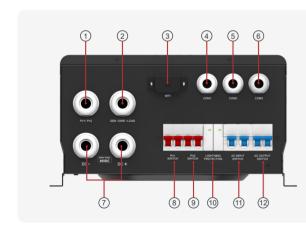
■ DC start &Automatic Self-Diagnostic Function

■ WIFI monitoring function (optional)

Compatible to generator

■ Parallel operation with up to 3 units

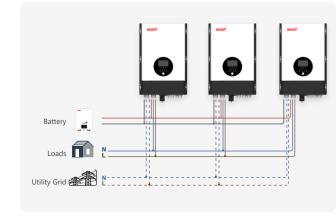
Back panel description



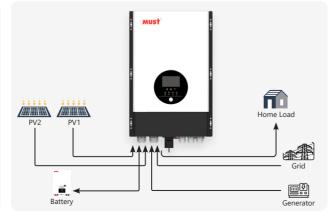
- 1. PV1/PV2 port
 - 7. Battery -/+
- 2. GEN/ Grid/ AC ouput port 8. PV1 Switch
- 3. WiFi port
- 4. Communication-1 port
- 10. Lighting protection
- 5. Communication-2 port 6. Communication-3 port
- 11. AC input switch 12. AC output switch

9. PV2 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 m	ode)		
Nominal output voltage RMS	100V/110V/120V/200V/240V				
Inverter effciency(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 b	pattery type (Supports lead-acid, gel, and	lithium batteries)		
Charger AC input breaker rating	100A				
Overcharge protection CD	62.8VDC for 48VDC mode				
Overcharge protection S.D.		02.0 V D C 101 10 V D C 1110 C C	10-140A (setting) battery terminal		
Maximum charge current		10-140A (setting) battery terminal			
Maximum charge current BTS	Yes Variances in ch	10-140A (setting) battery terminal	e battery temperature		
Maximum charge current BTS Continuous output power	Yes Variances in ch		e battery temperature		
Maximum charge current BTS Continuous output power BYPASS & PROTECTION	Yes Variances in ch	10-140A (setting) battery terminal narging voltage & S.D. voltage base on th	e battery temperature		
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CE-LVD (IEC62109-1:2010, EN IEC62109-2:2011); UL1741

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