

LOW FREQUENCY SPLIT PHASE SOLAR INVERTER

PV3300 TLV Series

3~6KW | AC110V/220V | MPPT 80A | WiFi | BMS



3-6kW Split Phase Output

Supports 110/120VAC single-phase and 220/240VAC split-phase applications.

80A MPPT High-Efficiency Charging

Built-in 80A MPPT maximizes solar energy utilization.

Flexible Settings

Adjust charging voltage/current, low-voltage shutdown (10-12V), utility/battery priority, input voltage range, inverter voltage (100/110/120V) and frequency (50/60Hz), with utility charging on/off control.

Battery Compatibility & BMS Communication

Supports lead-acid and lithium batteries, with CAN communication for smart lithium BMS management.

Comprehensive Protection

Includes overload, short-circuit, and low-voltage protection.

MAIN PARAMETER

MODEL	PV33-3024 TLV	PV33-3048 TLV	PV33-4024 TLV	PV33-4048 TLV	PV33-5048 TLV	PV33-6048 TLV
INVERTER OUTPUT						
Rated power	3KW		4KW		5KW	6KW
Power factor	1					
Output voltage RMS	100V / 110V / 120VAC (200V / 220V / 240VAC) ±10%					
Output frequency	50Hz or 60Hz (±0.3Hz)					
Inverter efficiency (peak)	>85%					
Line mode efficiency	>95%					
Overload	100%<Load<110% (alarm 5min then stop output and fault code 07) 110%<Load<125% (alarm 60s then stop output and fault code 07) Load > 125% (alarm 10s then stop output and fault code 07)					
Surge rating	9000VA	12000VA		15000VA	18000VA	
Capable of starting electric motor	1.5P	2P		3P		
BATTERY						
Battery voltage	24VDC/48VDC				48VDC	
Minimum start voltage	10V/ 10.5V/ 11V/ 11.5V/ 12V±0.5V; 12VDC×2 for 24V; ×4 for 48VAC					
Low battery cut off	low voltage fault code 04 (10V/ 10.5V/ 11V/ 11.5V/ 12V) for 12V model (21V/21V /22V/ 23V/ 24V) for 24V model (40V/ 42V/ 44V/ 46V/ 48V) for 48V model					
Low battery alarm	Add 0.5/battery: (low battery alarm one second one time) (10V/ 10.5V/ 11V/ 11.5V/ 12V) +0.5VDC for 12V model (21V/ 21V/ 22V/ 23V/ 24V) +1VDC for 24V model (40V/ 42V/ 44V/ 46V/ 48V) +2VDC for 48V model					
High voltage alarm	Add +1V/battery: (high voltage one second one time / after 30s fault 03) (12-14.5V) +1VDC for 12V model (24-29V) +2VDC for 24V model (48-58V) +4VDC for 48V model					
Save mode	Load ≤40W(110V) / 80W(220V)					
AC INPUT MODE						
Nominal input voltage	200Vac / 220Vac / 240Vac					
Max input voltage	270Vac MAX					
Input frequency	50Hz / 60Hz (auto sensing)					
Efficiency (AC mode)	>95% (load, full battery)					
Transfer time AC to DC	15ms(typical)					
SOLAR CHARGER						
Maximum PV Array Power	2500W	5000W	2500W	5000W	5000W	5000W
Maximum PV Charge Current	80A±4A					
DC Voltage	24V / 48V				48V	
MPPT Range @ Operating Voltage	30~230VDC @ 24V /60~230VDC @48V				60~230VDC @48V	
Maximum Solar Input Voltage	245±2Vdc				245±2Vdc	
Maximum Efficiency	>98%					
Standby Power Consumption	<2W					
CHARGE MODE						
Max charge current (±5A)	12V	/	/	/	/	/
	24V	40A	60A	/	/	/
	48V	20A	30A	35A	40A	
Min charge current 10A. Change by every 5A						

OTHER PARAMETER

MODEL	PV33-3024 TLV	PV33-3048 TLV	PV33-4024 TLV	PV33-4048 TLV	PV33-5048 TLV	PV33-6048 TLV
DIMENSIONS						
Machine Dimension (W*H*D)(mm)	359.2*443*188			362*544*188		
Package Dimension (W*H*D)(mm)	598*308*457			698*308*457		
N.W(kg)	/			/		
G.W(kg)	/			/		
Standard Warranty	2 year					
CERTIFICATION & STANDARDS						
CE-EMC+LVD (EN6100-6-3, EN6100-6-1+EN IEC62109-1, EN IEC62109-2)						