

LVSMT Series

12-20kW | 3 MPPTs | Three Phase

GoodWe's LVSMT series three-phase inverter is designed with low voltage power input, specifically tailored to small commercial PV applications. Developed as an efficient response to South American market needs for low-voltage inverters above 10 kW, the GoodWe LVSMT series is applicable to the different grid voltage ranges in the region, which mainly cover 208 V, 220 V and 240 V. With the GoodWe LVSMT series inverter, the system configuration can be simplified by avoiding the installation of an expensive transformer which adversely affects the system's conversion efficiency.



98.8% Max. Efficiency



Full-load running at 50°C



130% DC input oversizing



String level monitoring



110% AC output overloading



Arc-fault circuit interrupter

Technical Data	GW12KLV-MT	GW15KLV-MT	GW20KLV-MT
Input			
Max. Input Voltage (V)	800	800	800
MPPT Operating Voltage Range (V)	200~650	200~650	200~650
Start-up Voltage (V)	180	180	180
Nominal Input Voltage (V)	370	370	370
Max. Input Current per MPPT (A)	25	25	25
Max. Short Circuit Current per MPPT (A)	31.5	31.5	31.5
Number of MPPT	3	3	3
Number of Strings per MPPT	2	2	2
Output			
Nominal Output Power (W)	12000	15000	20700
Rated Apparent Power (VA)	12000	15000	20700
Max. AC Active Power (W)	11300@208V, 12000@220V, 13100@240V	14400@208V, 15000@220V, 16600@240V	19600@208V, 20700@220V, 22600@240V
Max. AC Apparent Power (VA)	13100	16600	22600
Nominal Output Voltage (V)	220V, 3L / PE	220V, 3L / PE	220V, 3L / PE
Nominal AC Grid Frequency (Hz)	50 / 60	50 / 60	50 / 60
Max. Output Current (A)	31.5	40	54.5
Output Power Factor	~1 (ADJUSTABLE FROM 0.8 LEADING TO 0.8 LAGGING)		
Max. Total Harmonic Distortion	<3%	<3%	<3%
Efficiency			
Max. Efficiency	98.7%	98.7%	98.8%
European Efficiency	98.4%	98.5%	98.5%
Protection			
PV String Current Monitoring	Integrated	Integrated	Integrated
Internal Humidity Detection	Integrated	Integrated	Integrated
Residual Current Monitoring Unit	Integrated	Integrated	Integrated
DC Insulation Resistance Detection	Integrated	Integrated	Integrated
Anti-islanding Protection	Integrated	Integrated	Integrated
DC Reverse Polarity Protection	Integrated	Integrated	Integrated
DC Surge Arrester	Type III (Type II optional)		
AC Surge Arrester	Type III (Type II optional)		
Output Overcurrent Protection	Integrated	Integrated	Integrated
Output Short Circuit Protection	Integrated	Integrated	Integrated
Output Overvoltage Protection	Integrated	Integrated	Integrated
DC Arc Fault Circuit Interrupter	Optional	Optional	Optional
Anti-PID Function for Module	Optional	Optional	Optional
General Data			
Operating Temperature Range (°C)	-30~60	-30~60	-30~60
Relative Humidity	0~100%	0~100%	0~100%
Max. Operating Altitude (m)	3000	3000	3000
Cooling Method	Smart Fan Cooling		
Display	LCD or LED+APP		
Communication	RS485 or WiFi or PLC		
Weight (Kg)	40	40	40
Dimension (W x H x D mm)	480 x 590 x 200	480 x 590 x 200	480 x 590 x 200
Ingress Protection Rating	IP65	IP65	IP65
Night Power Consumption (W)	<1	<1	<1
Protective class	I	I	I
Topology	Transformerless		

*: Please visit GoodWe website for the latest certificates.