

GOODWE

LVSMT Series

12-20kW | Three Phase | 3 MPPTs

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 10kW, the GoodWe LVSMT Series is applicable to the different grid voltage ranges in the region, which mainly cover 208V, 220V and 240V. 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



130% DC input oversizing



110% AC output overloading



Full-load running at 50°C



String level monitoring



Arc-fault circuit interrupter

Technical Data	GW12KLV-MT	GW15KLV-MT	GW20KLV-MT
Input			
Max. Input Voltage (V)		800	
MPPT Operating Voltage Range (V)		200 ~ 650	
Start-up Voltage (V)		180	
Nominal Input Voltage (V)		370	
Max. Input Current per MPPT (A)		25	
Max. Short Circuit Current per MPPT (A)		31.3	
Number of MPP Trackers		3	
Number of Strings per MPPT		2	
Output			
Nominal Output Power (kW)	12.0	15.0	20.7
Nominal Output Apparent Power (kVA)	12.0	15.0	20.7
Max. AC Active Power (kW)	11.3@208V, 12.0@220V, 13.1@240V	14.4@208V, 15.0@220V, 16.6@240V	19.6@208V, 20.7@220V, 22.6@240V
Max. AC Apparent Power (kVA)	13.1	16.6	22.6
Nominal Output Voltage (V)		220, 3L / N / PE or 3L / PE	
Nominal AC Grid Frequency (Hz)		50 / 60	
Max. Output Current (A)	31.5	40.0	54.5
Power Factor		~1 (Adjustable from 0.8 leading to 0.8 lagging)	
Max. Total Harmonic Distortion		<3%	
Efficiency			
Max. Efficiency	98.7%	98.7%	98.8%
European Efficiency	98.4%	98.5%	98.5%
Protection			
PV String Current Monitoring		Integrated	
PV Insulation Resistance Detection		Integrated	
ResidualCurrent Monitoring		Integrated	
PV Reverse Polarity Protection		Integrated	
Anti-islanding Protection		Integrated	
AC Overcurrent Protection		Integrated	
AC Short Circuit Protection		Integrated	
AC Overvoltage Protection		Integrated	
DC Switch		Integrated	
DC Surge Protection		Type III (Type II Optional)	
AC Surge Protection		Type III (Type II Optional)	
AFCI		Optional	
Remote Shutdown		Optional	
Anti-PID		Optional	
PID Recovery		Optional	
General Data			
Operating Temperature Range (°C)		-30 ~ +60	
Relative Humidity		0 ~ 100%	
Max. Operating Altitude (m)		3000	
Cooling Method		Smart Fan Cooling	
User Interface		LED, LCD (Optional), WLAN + APP	
Communication		RS485, WiFi or 4G or PLC (Optional)**	
Communication Protocols		Modbus-RTU (SunSpec Compliant)	
Weight (kg)		40.0	
Dimension (W × H × D mm)		480 × 590 × 200	
Noise Emission (dB)		<65	
Topology		Non-isolated	
Self-consumption at Night (W)		<1	
Ingress Protection Rating		IP65	
DC Connector		MC4 (Max.6mm²)	
AC Connector		OT / DT Terminal (Max.10mm²)	

*1: For Brazil, Communication is RS485, WiFi, USB, PLC (Optional).

*: Please visit GoodWe website for the latest certificates.