

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 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.



Fuse Free



Up to 110% AC overloading



98.8% max. Efficiency



String level monitoring



Max. 15A input current per string



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)	30	30	30
Max. Short Circuit Current per MPPT (A)	37.5	37.5	37.5
Number of MPP Trackers	3	3	3
Number of Strings per MPPT	2	2	2
Output			
Nominal Output Power (W)	12000	15000	20700
Nominal Output 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)	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	Integrated	Integrated
PV Insulation Resistance Detection	Integrated	Integrated	Integrated
Residual Current Monitoring	Integrated	Integrated	Integrated
PV Reverse Polarity Protection	Integrated	Integrated	Integrated
Anti-islanding Protection	Integrated	Integrated	Integrated
AC Overcurrent Protection	Integrated	Integrated	Integrated
AC Short Circuit Protection	Integrated	Integrated	Integrated
AC Overvoltage Protection	Integrated	Integrated	Integrated
DC Switch	Integrated	Integrated	Integrated
DC Surge Protection	Type III (Type II Optional)	Type III (Type II Optional)	Type III (Type II Optional)
AC Surge Protection	Type III (Type II Optional)	Type III (Type II Optional)	Type III (Type II Optional)
AFCI	Optional	Optional	Optional
Remote Shutdown	Optional	Optional	Optional
PID Recovery	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	Smart Fan Cooling	Smart Fan Cooling
User Interface	LED, LCD (Optional), WLAN + APP		
Communication	RS485, Wi-Fi or 4G or PLC (Optional)*		
Communication protocols	Modbus-RTU (SunSpec Compliant)		
Weight (kg)	40.0	40.0	40.0
Dimension (W × H × D mm)	480 × 590 × 200	480 × 590 × 200	480 × 590 × 200
Topology	Non-isolated	Non-isolated	Non-isolated
Self-consumption at Night (W)	<1	<1	<1
Ingress Protection Rating	IP65	IP65	IP65
DC Connector	MC4 (Max. 6mm²)	MC4 (Max. 6mm²)	MC4 (Max. 6mm²)
AC Connector	OT / DT terminal (Max. 10 mm²)		

*: Please visit GoodWe website for the latest certificates.

*: For Brazil-Communication is RS485, Wi-Fi, USB, PLC (Optional).