

LVSMT Series

12-35kW | Three Phase
Up to 6 MPPTs

GoodWe's LVSMT Series three-phase inverter is designed with low voltage power input, and is an ideal choice for commercial installations. Developed as an efficient response to South American market needs for low-voltage inverters above 10kW, this series is applicable to special grid voltage ranges within the region. With the GoodWe LVSMT Series inverter, the system configuration can be simplified by avoiding the installation of an expensive transformer, greatly reducing the initial investment costs of the system.



Smart Control & Monitoring

- String level monitoring
- Power line communication



High Power Generation for High Returns

- Max. Efficiency up to 98.8%
- 130% DC input oversizing



Superb Safety & Reliability

- Optional AFCI
- IP65 ingress protection



Friendly & Thoughtful Design

- 200V-650V wide MPPT voltage range
- Fuse-free design

Technical Data	GW12KLV-MT	GW15KLV-MT	GW20KLV-MT	GW30KLS-MT	GW35KLS-MT
Input					
Max. Input Voltage (V)	800	800	800	800	800
MPPT Operating Voltage Range (V)	200 ~ 650	200 ~ 650	200 ~ 650	200 ~ 650	200 ~ 650
Start-up Voltage (V)	180	180	180	180	180
Nominal Input Voltage (V)	370	370	370	370	370
Max. Input Current per MPPT (A)	30	30	30	30	30
Max. Short Circuit Current per MPPT (A)	37.5	37.5	37.5	37.5	37.5
Number of MPP Trackers	3	3	3	5	6
Number of Strings per MPPT	2	2	2	2	2
Output					
Nominal Output Power (W)	12000	15000	20700	30000	35000
Nominal Output Apparent Power (VA)	12000	15000	20700	30000	35000
Max. AC Active Power (W)	11300@208V, 12000@220V, 13100@240V	14400@208V, 15000@220V, 16600@240V	19600@208V, 20700@220V, 22600@240V	30000	35000
Max. AC Apparent Power (VA)	13100	16600	22600	30000	35000
Nominal Output Voltage (V)	220, 3L / N/PE or 3L / PE				
Nominal AC Grid Frequency (Hz)	50 / 60	50 / 60	50 / 60	50 / 60	50 / 60
Max. Output Current (A)	31.5	40.0	54.5	80.0	96.0
Power Factor	~1 (Adjustable from 0.8 leading to 0.8 lagging)				
Max. Total Harmonic Distortion	<3%	<3%	<3%	<3%	<3%
Efficiency					
Max. Efficiency	98.7%	98.7%	98.8%	98.0%	98.0%
European Efficiency	98.4%	98.5%	98.5%	97.7%	97.7%
Protection					
PV String Current Monitoring	Integrated	Integrated	Integrated	Integrated	Integrated
PV Insulation Resistance Detection	Integrated	Integrated	Integrated	Integrated	Integrated
Residual Current Monitoring	Integrated	Integrated	Integrated	Integrated	Integrated
PV Reverse Polarity Protection	Integrated	Integrated	Integrated	Integrated	Integrated
Anti-islanding Protection	Integrated	Integrated	Integrated	Integrated	Integrated
AC Overcurrent Protection	Integrated	Integrated	Integrated	Integrated	Integrated
AC Short Circuit Protection	Integrated	Integrated	Integrated	Integrated	Integrated
AC Overvoltage Protection	Integrated	Integrated	Integrated	Integrated	Integrated
DC Switch	Integrated	Integrated	Integrated	Integrated	Integrated
DC Surge Protection	Type III (Type II Optional)			Type II (Type I Optional)	
AC Surge Protection	Type III (Type II Optional)			Type II	
AFCI	Optional	Optional	Optional	Optional	Optional
Remote Shutdown	Optional	Optional	Optional	Optional	Optional
PID Recovery	Optional	Optional	Optional	Optional	Optional
General Data					
Operating Temperature Range (°C)	-30 ~ +60	-30 ~ +60	-30 ~ +60	-30 ~ +60	-30 ~ +60
Relative Humidity	0 ~ 100%	0 ~ 100%	0 ~ 100%	0 ~ 100%	0 ~ 100%
Max. Operating Altitude (m)	3000	3000	3000	3000	3000
Cooling Method	Smart Fan Cooling				
User Interface	LED, LCD (Optional), WLAN + APP				
Communication	RS485, WiFi or 4G or PLC (Optional) ^{*1}				
Communication Protocols	Modbus-RTU (SunSpec Compliant)				
Weight (kg)	40.0	40.0	40.0	55.0	55.0
Dimension (W × H × D mm)	480 × 590 × 200	480 × 590 × 200	480 × 590 × 200	520 × 660 × 220	520 × 660 × 220
Topology	Non-isolated	Non-isolated	Non-isolated	Non-isolated	Non-isolated
Self-consumption at Night (W)	<1	<1	<1	<1	<1
Ingress Protection Rating	IP65	IP65	IP65	IP65	IP65
DC Connector	MC4 (4 ~ 6mm ²)	MC4 (4 ~ 6mm ²)	MC4 (4 ~ 6mm ²)	MC4 (4 ~ 6mm ²)	MC4 (4 ~ 6mm ²)
AC Connector	OT / DT Terminal (Max.25mm ²)			OT / DT Terminal (Max.50mm ²)	

*1: For Brazil, Communication is RS485,WiFi,USB,PLC (Optional).
 *: Please visit GoodWe website for the latest certificates.

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