

MS-US Series

5-11.4kW | Single Phase | Up to 3 MPPTs
UL certified

The MS-US Series is a high-quality PV solution engineered to meet the demanding needs of North American homeowners. Allowing a maximum 16A input current per string and supporting up to 160% DC oversizing, this product was created for long-term, trouble-free lifetime operation with maximum energy production. Built-in optimization effortlessly addresses complex rooftops and shaded areas without the need for traditional module-level optimizers, which add cost and complexity to the system.



Smart Control & Monitoring

- Power export limit
- 24-hour load consumption monitoring



Fully Integrated Design

- Optimization built-in
- High quality, robust components



Superb Safety & Reliability

- Integrated AFCI & rapid shutdown
- Optional DC Type II SPD & SPD failure alarm



High Power Generation

- Up to 16A max. DC input current per string
- Up to 160% DC input oversizing

Technical Data	GW5000-MS- US30	GW6000-MS- US30	GW7700-MS- US30	GW9600-MS- US30	GW11K4-MS- US30
Input					
Max. Input Power (W)	8000	9600	12320	15360	18240
Max. Input Voltage (V) ¹			600		
MPPT Voltage Range at Nominal Power (V) (at 240V)	165 ~ 500	198 ~ 500	170 ~ 500	210 ~ 500	250 ~ 500
MPPT Voltage Range at Nominal Power (V) (at 208V)	143 ~ 500	171 ~ 500	150 ~ 500	182 ~ 500	217 ~ 500
Start-up Voltage (V)			80		
Nominal Input Voltage (V) (at 240V)			380		
Nominal Input Voltage (V) (at 208V)			330		
Max. Input Current per MPPT (A)			16		
Max. Short Circuit Current per MPPT (A)			23.4		
Number of MPP Trackers	2	2	3	3	3
Number of Strings per MPPT			1		
Output					
Nominal Output Power (W) (at 240V)	5000	6000	7680	9600	11400
Nominal Output Power (W) (at 208V)	4333	5200	6650	8320	9880
Nominal Output Apparent Power (VA) (at 240V)	5000	6000	7680	9600	11400
Nominal Output Apparent Power (VA) (at 208V)	4333	5200	6650	8320	9880
Max. AC Active Power (W) (at 240V)	5000	6000	7680	9600	11400
Max. AC Active Power (W) (at 208V)	4333	5200	6650	8320	9880
Max. AC Apparent Power (VA) (at 240V)	5000	6000	7680	9600	11400
Max. AC Apparent Power (VA) (at 208V)	4333	5200	6650	8320	9880
Nominal Output Voltage (V)			240 / 208		
Nominal AC Grid Frequency (Hz)			60		
Max. Output Current (A)	20.8	25.0	32.0	40.0	47.5
Power Factor		~1 (Adjustable from 0.8 leading to 0.8 lagging)			
Max. Total Harmonic Distortion			<3%		
Efficiency					
Max. Efficiency	97.5%	97.5%	97.5%	97.8%	97.8%
CEC Efficiency (at 240V)	96.5%	96.5%	96.5%	97.0%	97.0%
CEC Efficiency (at 208V)	96.0%	96.0%	96.5%	96.5%	96.5%
Protection					
PV String Current Monitoring			Integrated		
PV InsulationResistance Detection			Integrated		
Residual Current 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			Integrated		
Rapid Shutdown			Integrated		
General Data					
Operating Temperature Range (°F)			-31 ~ +140 (-35 ~ +60°C)		
Derating temperature (°F)			113 (45°C)		
Storage Temperature Range (°F)			-40 ~ +158 (-40 ~ +70°C)		
Relative Humidity			0 ~ 95%		
Max. Operating Altitude (ft)			9842 (3000m)		
Cooling Method		Natural Convection		Natural Convection (internal fan air circulation)	
User Interface			LED, WLAN + APP		
Communication			RS485, WiFi + LAN + Bluetooth, 4G (Optional)		
CommunicationProtocols			Modbus-RTU (SunSpec Compliant)		
Weight (lb)	51.8 (23.0kg)	51.8 (23.0kg)	55.1 (25.0kg)	55.1 (25kg)	55.1 (25kg)
Dimension (W x H x D in)			19.2 x 26.4 x 7.8 (487 x 670 x 199 mm)		
Noise Emission (dB)	<25	<25	<35	<35	<35
Topology			Non-isolated		
Self-consumptionat Night (W)			<5		
Ingress ProtectionRating			Type 4X (IP66)		
Certification					
Grid Standards			UL1741, UL1741SB, UL1741-CRD, UL1699B, CSA C22.2		
Safety Regulation			IEEE2030.5, IEEE1547, IEEE1547.1-2020, California Rule 21		
EMC			FCC Part15 ClassB		

*1: When configuring PV module, it is recommended that the open circuit voltage of each string of connected PV module be less than 525V, otherwise it will lead to derating.

*: Please visit GoodWe website for the latest certificates.

*: All pictures shown are for reference only. Actual appearance may vary.