

MS-US Series

5-11.4kW | Single Phase
Up to 3 MPPTs

The MS-US Series is a high-quality PV solution engineered to meet the demanding needs of U.S. 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



Superb Safety & Reliability

- Integrated AFCI & Rapid Shutdown
- Optional DC Type II SPD & SPD failure alarm



Fully Integrated Design

- Optimization built-in
- High quality, robust components



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 Voltage (V)		600				
MPPT Operating Voltage Range (V)		65 ~ 550				
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)		-13 ~ 140 (-25 ~ 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				
User Interface		LED, WLAN + APP				
Communication		RS485, WiFi or Bluetooth or 4G or LAN (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)				

*: Please visit GoodWe website for the latest certificates.