

## 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	GW7600-MS-US30	GW9600-MS-US30	GW11K4-MS-US30
<b>Input</b>						
Max. Input Voltage (V)	600	600	600	600	600	600
MPPT Operating Voltage Range (V)	65 ~ 550	65 ~ 550	65 ~ 550	65 ~ 550	65 ~ 550	65 ~ 550
Start-up Voltage (V)	80	80	80	80	80	80
Nominal Input Voltage (V)	330 (at 208V) 380 (at 240V)	330 (at 208V) 380 (at 240V)	330 (at 208V) 380 (at 240V)	330 (at 208V) 380 (at 240V)	330 (at 208V) 380 (at 240V)	330 (at 208V) 380 (at 240V)
Max. Input Current per MPPT (A)	16	16	16	16	16	16
Max. Short Circuit Current per MPPT (A)	23.4	23.4	23.4	23.4	23.4	23.4
Number of MPP Trackers	2	2	2	3	3	3
Number of Strings per MPPT	1	1	1	1	1	1
<b>Output</b>						
Nominal Output Power (W)	5000 (at 240V) 4333 (at 208V)	6000 (at 240V) 5200 (at 208V)	7600 (at 240V) 6580 (at 208V)	9600 (at 240V) 8320 (at 208V)	11400 (at 240V) 9880 (at 208V)	11400 (at 240V) 9880 (at 208V)
Nominal Output Apparent Power (VA)	5000 (at 240V) 4333 (at 208V)	6000 (at 240V) 5200 (at 208V)	7600 (at 240V) 6580 (at 208V)	9600 (at 240V) 8320 (at 208V)	11400 (at 240V) 9880 (at 208V)	11400 (at 240V) 9880 (at 208V)
Max. AC Active Power (W)	5000 (at 240V) 4333 (at 208V)	6000 (at 240V) 5200 (at 208V)	7600 (at 240V) 6580 (at 208V)	9600 (at 240V) 8320 (at 208V)	11400 (at 240V) 9880 (at 208V)	11400 (at 240V) 9880 (at 208V)
Max. AC Apparent Power (VA)	5000 (at 240V) 4333 (at 208V)	6000 (at 240V) 5200 (at 208V)	7600 (at 240V) 6580 (at 208V)	9600 (at 240V) 8320 (at 208V)	11400 (at 240V) 9880 (at 208V)	11400 (at 240V) 9880 (at 208V)
Nominal Output Voltage (V)	240 / 208	240 / 208	240 / 208	240 / 208	240 / 208	240 / 208
Nominal AC Grid Frequency (Hz)	60	60	60	60	60	60
Max. Output Current (A)	20.8	25.0	31.7	40.0	47.5	47.5
Power Factor	~ 1 (Adjustable from 0.8 leading to 0.8 lagging)					
Max. Total Harmonic Distortion	<3%	<3%	<3%	<3%	<3%	<3%
<b>Efficiency</b>						
Max. Efficiency	97.5%	97.5%	97.5%	97.8%	97.8%	97.8%
CEC Efficiency	96.5% (at 240V) 96.0% (at 208V)	96.5% (at 240V) 96.0% (at 208V)	96.5% (at 240V) 96.5% (at 208V)	97.0% (at 240V) 96.5% (at 208V)	97.0% (at 240V) 96.5% (at 208V)	97.0% (at 240V) 96.5% (at 208V)
<b>Protection</b>						
PV String Current Monitoring	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated
PV Insulation Resistance Detection	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated
Residual Current Monitoring	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated
PV Reverse Polarity Protection	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated
Anti-islanding Protection	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated
AC Overcurrent Protection	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated
AC Short Circuit Protection	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated
AC Overvoltage Protection	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated
DC Switch	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated
DC Surge Protection	Type III (Type II Optional)					
AC Surge Protection	Type III (Type II Optional)					
AFCI	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated
Rapid Shutdown	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated
<b>General Data</b>						
Operating Temperature Range	-25 ~ +60 (°C) -13 ~ +140 (°F)	-25 ~ +60 (°C) -13 ~ +140 (°F)	-25 ~ +60 (°C) -13 ~ +140 (°F)	-25 ~ +60 (°C) -13 ~ +140 (°F)	-25 ~ +60 (°C) -13 ~ +140 (°F)	-25 ~ +60 (°C) -13 ~ +140 (°F)
Relative Humidity	0 ~ 95%	0 ~ 95%	0 ~ 95%	0 ~ 95%	0 ~ 95%	0 ~ 95%
Max. Operating Altitude	3000 (m) 9842 (ft)	3000 (m) 9842 (ft)	3000 (m) 9842 (ft)	3000 (m) 9842 (ft)	3000 (m) 9842 (ft)	3000 (m) 9842 (ft)
Cooling Method	Natural Convection	Natural Convection	Natural Convection	Natural Convection	Natural Convection	Natural Convection
User Interface	LED, WLAN + APP	LED, WLAN + APP	LED, WLAN + APP	LED, WLAN + APP	LED, WLAN + APP	LED, WLAN + APP
Communication	RS485, WiFi or Bluetooth or 4G or LAN (Optional)					
Communication Protocols	Modbus-RTU (SunSpec Compliant)					
Weight	23.0 (kg) 51.8 (lb)	23.0 (kg) 51.8 (lb)	23.0 (kg) 51.8 (lb)	25.0 (kg) 55.1 (lb)	25.0 (kg) 55.1 (lb)	25.0 (kg) 55.1 (lb)
Dimension (W x H x D)	487 x 670 x 199 (mm) 19.2 x 26.4 x 7.8 (in)					
Noise Emission (dB)	<25	<25	<25	<35	<35	<35
Topology	Non-isolated	Non-isolated	Non-isolated	Non-isolated	Non-isolated	Non-isolated
Self-consumption at Night (W)	<5	<5	<5	<5	<5	<5
Ingress Protection Rating	Type 4X (IP66)	Type 4X (IP66)	Type 4X (IP66)	Type 4X (IP66)	Type 4X (IP66)	Type 4X (IP66)

\*: Please visit GoodWe website for the latest certificates.