



Smart Control & Monitoring

- · Smart load control with dry contacts
- · Smart home integration with multi-protocol communications



Superb Safety & Reliability

- · Optional AFCI on DC side1
- · Remote Shutdown



Friendly & Thoughtful Design

- · Plug & Play
- · Elegant and compact design



Flexible & Adaptable Applications

- · Maximum 16A DC input current per string and high-power module compatibility
- · Strong backup power supply



Technical Data	GW3000-E3-20	-GW3000-E3-20 G	MADOOONI-E9-	20 GW5000-ES-20 GV	13000INI-E9-	20-GW0000-E5-20 G	WOOODIN
Battery Input Data							
Battery Type*1	Li-lon / Lead-acid	Li-lon / Lead-acid	Li-lon	Li-Ion / Lead-acid	Li-lon	Li-lon / Lead-acid	Li-lo
Nominal Battery Voltage (V)				48			
Battery Voltage Range (V)				40 ~ 60			
Max. Continuous Charging Current (A)*1	60	75	60	120	60	120	60
Max. Continuous Discharging Current (A)*1	60	75	60	120 5000	60 3000	120 6000	60
Max. Charging Power (W)*1 Max. Discharging Power (W)	3000 3200	3600 3900	3000 3200	5300	3200	6300	3000
	3200	3900	3200	3300	3200	0300	3200
PV String Input Data							
Max. Input Power (W)*2	6000	7200	7200	10000	10000	12000	1200
Max. Input Voltage (V)				600			
MPPT Operating Voltage Range (V)**				60 ~ 550			
Start-up Voltage (V)				58			
Nominal Input Voltage (V) Max. Input Current per MPPT (A)				360 16			
Max. Short Circuit Current per MPPT (A)				23			
Number of MPP Trackers	1	2	2	2	2	2	2
Number of Strings per MPPT				1			
AC Output Data (On-grid)							
	2000	2000	2000	F000*3	E000*3	C000*3	6000
Nominal Apparent Power Output to Utility Grid (VA)	3000	3680 3680	3680 3680	5000 ^{*3}	5000 ^{*3}	6000 ^{*3}	6000
Max. Apparent Power Output to Utility Grid (VA) Max. Apparent Power from Utility Grid (VA)	6000	7360	3680	10000	5000	10000	6000
Nominal Output Voltage (V)	0000	1 000	5000	220 / 230 / 240	5000	10000	3000
Output Voltage Range (V)				170 ~ 280			
Nominal AC Grid Frequency (Hz)				50 / 60			
Max. AC Current Output to Utility Grid (A)	13.6	16.7	16.7	22.7	22.7	27.3	27.3
Max. AC Current From Utility Grid (A)	27.3	33.5	16.7	43.5	22.7	43.5	27.3
Nominal Output Current (A)	13.0	16.0	16.0	21.7	21.7	26.1	26.1
Power Factor			~1 (Adjustal	ble from 0.8 leading to	0.8 lagging)	
Max. Total Harmonic Distortion				<3%			
AC Output Data (Back-up)							
Back-up Nominal Apparent Power (VA)	3000	3680	3680	5000	5000	6000	6000
Max. Output Apparent Power (VA)	3000 (6000@10sec)	3680 (7360@10sec)	3680	5000 (10000@10sec)	5000	6000 (10000@10sec)	6000
Max. Output Current (A)	13.6	16.7	16.7	22.7	22.7	27.3	27.3
Nominal Output Voltage (V)				220 / 230 / 240			
Nominal Output Frequency (Hz)				50 / 60			
Output THDv (@Linear Load)				<3%			
Efficiency							
Max. Efficiency				97.6%			
European Efficiency				96.7%			
Max. Battery to AC Efficiency				95.5%			
MPPT Efficiency				99.9%			
Protection							
PV String Current Monitoring				Integrated			
PV Insulation Resistance Detection				Integrated		-	
Residual Current Monitoring				Integrated			
PV Reverse Polarity Protection				Integrated			
Anti-islanding Protection				Integrated		<u> </u>	
AC Overcurrent Protection				Integrated			
AC Short Circuit Protection				Integrated			
AC Overvoltage Protection				Integrated			
DC Switch DC Surge Protection				Integrated Type II			
AC Surge Protection				Type III			
				Optional			
AFCI				Integrated			
AFCI Remote Shutdown				micgratea			
Remote Shutdown				micgrated			
Remote Shutdown General Data				J.			
Remote Shutdown General Data Operating Temperature Range (°C)				-25 ~ +60			
Remote Shutdown General Data Operating Temperature Range (°C) Relative Humidity				-25 ~ +60 0 ~ 95%			
Remote Shutdown General Data Operating Temperature Range (°C) Relative Humidity Max. Operating Altitude (m)				-25 ~ +60 0 ~ 95% 3000 (>2000 Derating)			
Remote Shutdown General Data Operating Temperature Range (°C) Relative Humidity Max. Operating Altitude (m) Cooling Method				-25 ~ +60 0 ~ 95% 3000 (>2000 Derating) Natural Convection			
Remote Shutdown General Data Operating Temperature Range (°C) Relative Humidity Max. Operating Altitude (m) Cooling Method Display				-25 ~ +60 0 ~ 95% 3000 (>2000 Derating) Natural Convection LED, WLAN + APP			
Remote Shutdown General Data Operating Temperature Range (°C) Relative Humidity Max. Operating Altitude (m) Cooling Method				-25 ~ +60 0 ~ 95% 3000 (>2000 Derating) Natural Convection			
Remote Shutdown General Data Operating Temperature Range (°C) Relative Humidity Max. Operating Altitude (m) Cooling Method Display Communication with BMS				-25 ~ +60 0 ~ 95% 3000 (>2000 Derating) Natural Convection LED, WLAN + APP CAN			
Remote Shutdown General Data Operating Temperature Range (°C) Relative Humidity Max. Operating Altitude (m) Cooling Method Display Communication with BMS Communication with Meter	19.6	20.8		-25 ~ +60 0 ~ 95% 3000 (>2000 Derating) Natural Convection LED, WLAN + APP CAN RS485	20.0	21.5	20.0
Remote Shutdown General Data Operating Temperature Range (°C) Relative Humidity Max. Operating Altitude (m) Cooling Method Display Communication with BMS Communication with Meter Communication with Portal Weight (kg) Dimension (W x H x D mm)	19.6	20.8	20.0	-25 ~ +60 0 ~ 95% 3000 (>2000 Derating) Natural Convection LED, WLAN + APP CAN RS485 WiFi / WiFi + LAN / 4G 21.5 505.9 × 434.9 × 154.8	20.0	21.5	20.0
Remote Shutdown General Data Operating Temperature Range (°C) Relative Humidity Max. Operating Altitude (m) Cooling Method Display Communication with BMS Communication with Meter Communication with Portal Weight (kg) Dimension (W x H x D mm) Topology	19.6	20.8	20.0	-25 ~ +60 0 ~ 95% 3000 (>2000 Derating) Natural Convection LED, WLAN + APP CAN RS485 WiFi / WiFi + LAN / 4G 21.5 505.9 × 434.9 × 154.8 Non-isolated	20.0	21.5	20.0
Remote Shutdown General Data Operating Temperature Range (°C) Relative Humidity Max. Operating Altitude (m) Cooling Method Display Communication with BMS Communication with Meter Communication with Portal Weight (kg) Dimension (W × H × D mm) Topology Self-consumption at Night (W)	19.6	20.8	20.0	-25 ~ +60 0 ~ 95% 3000 (>2000 Derating) Natural Convection LED, WLAN + APP CAN RS485 WiFi / WiFi + LAN / 4G 21.5 505.9 × 434.9 × 154.8 Non-isolated <10	20.0	21.5	20.0
Remote Shutdown General Data Operating Temperature Range (°C) Relative Humidity Max. Operating Altitude (m) Cooling Method Display Communication with BMS Communication with Meter Communication with Portal Weight (kg) Dimension (W × H × D mm) Topology Self-consumption at Night (W) Ingress Protection Rating	19.6	20.8	20.0	-25 ~ +60 0 ~ 95% 3000 (>2000 Derating) Natural Convection LED, WLAN + APP CAN RS485 WiFi / WiFi + LAN / 4G 21.5 505.9 × 434.9 × 154.8 Non-isolated <10 IP65	20.0	21.5	20.0
Remote Shutdown General Data Operating Temperature Range (°C) Relative Humidity Max. Operating Altitude (m) Cooling Method Display Communication with BMS Communication with Meter Communication with Portal Weight (kg) Dimension (W × H × D mm) Topology Self-consumption at Night (W)	19.6	20.8	20.0	-25 ~ +60 0 ~ 95% 3000 (>2000 Derating) Natural Convection LED, WLAN + APP CAN RS485 WiFi / WiFi + LAN / 4G 21.5 505.9 × 434.9 × 154.8 Non-isolated <10	20.0	21.5	20.0

^{*1:} The actual charge and discharge current / power also depends on the battery.
*2: The max power is the actual power of PV.
*3: 4600 for VDE-AR-N4105 & NRS 097-2-1.

^{*:} Please visit GoodWe website for the latest certificates.
*: All pictures shown are for reference only. Actual appearance may vary.
**: Please refer to the user manual for the MPPT Voltage Range at Nominal Power.