

MT Series

50-80kW | 4 MPPTs | Three Phase

The second generation of GoodWe MT series inverter is suited for medium and large scale commercial rooftops and ground-mounted solar PV systems where maximum versatility and profitability are important. With its compact design and power boost function, the Goodwe MT series of the new generation can provide a 150% continuous maximum AC output power overload, offering a faster return on investment. The start-up voltage is 200V, much lower than other products, which makes the inverter start up earlier, therefore generating more power over time.



Up to 150% DC input oversizing



String level monitoring



Up to 115% AC output overloading



Full-load running at 50°C



Up to 99% Max. Efficiency



Power line communication

Technical Data	GW50KN-MT	GW60KN-MT	GW50KBF-MT	GW60KBF-MT	GW70KMV-MT	GW70KHV-MT	GW80KHV-MT	GW75K-MT	GW80K-MT	GW75KBF-MT	GW80KBF-MT	
DC Input Data												
Max. PV Power (W)	65000	80000	65000	80000	95000	91000	120000	112500	120000	97500	104000	
Max. DC Input Voltage (V)	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	
MPPT Range (V)	200~1000	200~1000	200~1000	200~1000	200~1000	200~1000	200~1000	200~1000	200~1000	200~1000	200~1000	
Starting Voltage (V)	200	200	200	200	200	200	200	200	200	200	200	
Min. Feed-in Voltage (V)	210	210	210	210	/	210	210	210	210	210	210	
Nominal DC Input Voltage (V)	620	620	620	620	720	750	800	600	620	750	800	
Max. Input Current per MPPT (A)	33 / 33 / 22 / 22	33	30	44	39	33	44	44	44	44	39	
Max. Short Circuit Current per MPPT (A)	41.5 / 41.5 / 27.5 / 27.5	41.5	37.5	55	55	41.5	55	55	55	55	54.8	
Number of MPPTs	4	4	4	4	4	4	4	4	4	4	4	
Number of Strings per MPPT	3 / 3 / 2 / 2	3	2	3	3	3	3	4 (Standard) 3 (Optional, Support bifacial module)		3	3	
AC Output Data												
Nominal Output Power (W)	50000	60000	50000	60000	70000	70000	80000	75000	80000	75000	80000	
Max. AC Active Power (cosφ=1)	55000; 57500 @415Vac ^{*1}	66000; 69000 @415Vac ^{*1}	55000; 57500 @415Vac ^{*1}	66000; 69000 @415Vac ^{*1}	77000	77000* ¹	88000* ¹	75000	88000* ¹	82500* ¹	88000* ¹	
Max. Output Apparent Power (VA)	55000; 57500 @415Vac ^{*2}	66000; 69000 @415Vac ^{*2}	55000; 57500 @415Vac ^{*2}	66000; 69000 @415Vac ^{*2}	77000	77000* ²	88000* ²	75000	88000* ²	82500* ²	88000* ²	
Nominal Output Voltage (V)	400, default 3L+N+PE, 3L+PE optional in settings				480, 3L / PE	500, 3L / PE	540, 3L / PE	380 / 415	400, default 3L+N+PE, 3L+PE optional in settings		500, 3L / PE	540, 3L / PE
Nominal Output Frequency (Hz)	50 / 60	50 / 60	50 / 60	50 / 60	50 / 60	50 / 60	50 / 60	50 / 60	50 / 60	50 / 60	50 / 60	
Max. Output Current (A)	80	96	80	96	92.6	89	94.1	133	133	95.3	94.1	
Output Power Factor	~1 (Adjustable from 0.8 leading to 0.8 lagging)											
Output THDi (@Nominal Output)	<3%	<3%	<3%	<3%	<3%	<3%	<3%	<3%	<3%	<3%	<3%	
Efficiency												
Max. Efficiency	98.7%	98.8%	98.8%	98.8%	99.0%	99.0%	99.0%	98.8%	98.8%	99.0%	99.0%	
European Efficiency	98.3%	98.5%	98.3%	98.3%	98.4%	98.4%	98.4%	98.3%	98.3%	98.4%	98.4%	
Protection												
PV String Current Monitoring	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	
Anti-Islanding Protection	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	
Input Reverse Polarity Protection	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	
Insulation monitoring	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	
DC fuse	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	
Anti-PID Function for Module	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional	
DC Surge Arrester	Integrated (Type II)											
AC Surge Arrester	Integrated (Type II)											
Residual Current Monitoring Unit	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	
AC Over Current Protection	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	
AC Short Circuit Protection	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	
AC Over Voltage Protection	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	
Humidity Monitoring	-	-	-	-	-	-	NA	NA	Integrated	Integrated	NA	NA
General Data												
Ambient Temperature Range (°C)	-30~60	-30~60	-30~60	-30~60	-30~60	-30~60	-30~60	-30~60	-30~60	-30~60	-30~60	
Relative Humidity	0~100%	0~100%	0~100%	0~100%	0~100%	0~100%	0~100%	0~100%	0~100%	0~100%	0~100%	
Operating Altitude (m)	≤4000	≤4000	≤4000	≤4000	≤4000	≤4000	≤4000	≤4000	≤4000	≤4000	≤4000	
Cooling	Fan Cooling											
Display	LCD or WiFi+APP			LED, WiFi+APP		LCD or WiFi+APP		LED, WiFi+APP				
Communication	RS485 or WiFi or PLC				RS485 or WiFi	RS485 or WiFi or PLC		RS485 & WiFi, PLC (Optional)		RS485 or WiFi or PLC		
Weight (Kg)	59	64	60	65	65	60	65	70	70	65	65	
Dimension (Width x Height x Depth mm)	586 x 788 x 264			586 x 788 x 267		586 x 788 x 264		586 x 788 x 267				
Protection Degree	IP65	IP65	IP65	IP65	IP65	IP65	IP65	IP65	IP65	IP65	IP65	
Night Self Consumption (W)	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Topology	Transformerless											

*1: For Belgium Max. Output Power (W): GW50KN-MT is 50000; GW60KN-MT is 60000; GW50KBF-MT is 50000; GW60KBF-MT is 60000; GW70KHV-MT is 70000; GW80KHV-MT is 80000; GW80K-MT is 80000; GW75KBF-MT is 75000; GW80KBF-MT is 80000.

*2: For Belgium Max. Output Apparent Power (VA): GW50KN-MT is 50000; GW60KN-MT is 60000; GW50KBF-MT is 50000; GW60KBF-MT is 60000; GW70KHV-MT is 70000; GW80KHV-MT is 80000; GW80K-MT is 80000; GW75KBF-MT is 75000; GW80KBF-MT is 80000.

*: Please visit GoodWe website for the latest certificates.