

MT Series

50-80kW | Three Phase

4 MPPTS

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



Up to 115% AC output overloading



Up to 99% Max. Efficiency



String level monitoring



Full-load running at 50°C



Power line communication

Technical Data	GW50KN -MT	GW60KN -MT	GW50KBF -MT	GW60KBF -MT	GW75KBF -MT	GW80KBF -MT	GW70KHV -MT	GW80KHV -MT	GW75K -MT	GW80K -MT	
Input											
Max. Input Voltage (V)	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	
MPPT Operating Voltage Range (V)	200 ~ 1000	200 ~ 1000	200 ~ 1000	200 ~ 1000	200 ~ 1000	200 ~ 1000	200 ~ 1000	200 ~ 1000	200 ~ 1000	200 ~ 1000	
Start-up Voltage (V)	200	200	200	200	200	200	200	200	200	200	
Nominal Input Voltage (V)	620	620	620	620	750	800	750	800	600	620	
Max. Input Current per MPPT (A)	33 / 33 / 22 / 22	33	30	44	44	39	33	44	44	44	
Max. Short Circuit Current per MPPT (A)	41.5 / 41.5 / 27.5 / 27.5	41.5	37.5	55.0	55.0	54.8	41.5	55.0	55.0	55.0	
Number of MPP Trackers	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	4 (Standard), 3 (Optional, Support bifacial module)	3 (Standard, Support bifacial module), 4 (Optional)	
Output											
Nominal Output Power (W)	50000	60000	50000	60000	75000	80000	70000	80000	75000	80000	
Nominal Output Apparent Power (VA)	50000	60000	50000	60000	75000	80000	70000	80000	75000	80000	
Max. AC Active Power (W)	55000; 57500 @415V ¹	66000; 69000 @415V ¹	55000; 57500 @415V ¹	66000; 69000 @415V ¹	82500* ¹	88000* ¹	77000* ¹	88000* ¹	75000	88000* ¹	
Max. AC Apparent Power (VA)	55000; 57500 @415V ²	66000; 69000 @415V ²	55000; 57500 @415V ²	66000; 69000 @415V ²	82500* ²	88000* ²	77000* ²	88000* ²	75000	88000* ²	
Nominal Output Voltage (V)	400, 3L / N / PE or 3L / PE				500, 3L / PE	540, 3L / PE	500, 3L / PE	540, 3L / PE	400, 3L / N / PE or 3L / PE		
Nominal AC Grid Frequency (Hz)	50 / 60	50 / 60	50 / 60	50 / 60	50 / 60	50 / 60	50 / 60	50 / 60	50 / 60	50 / 60	
Max. Output Current (A)	80.0	96.0	80.0	96.0	95.3	94.1	89.0	94.1	133.0	133.0	
Power Factor	~1 (adjustable from 0.8 lagging to 0.8 leading)										
Max. Total Harmonic Distortion	<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%	99.0%	98.8%	98.8%	
European Efficiency	98.3%	98.5%	98.3%	98.3%	98.4%	98.4%	98.4%	98.4%	98.3%	98.3%	
Protection											
PV String Current Monitoring	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	
PV Insulation Resistance Detection	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	
Residual Current Monitoring	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	
PV Reverse Polarity Protection	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	
Anti-islanding Protection	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	
AC Overcurrent Protection	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	
AC Short Circuit Protection	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	
AC Overvoltage Protection	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	
DC Switch	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional	
DC Surge Protection	Type II	Type II	Type II	Type II	Type II	Type II	Type II	Type II	Type II	Type II	
AC Surge Protection	Type II	Type II	Type II	Type II	Type II	Type II	Type II	Type II	Type II	Type II	
AFCI	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional	
PID Recovery	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional	
General Data											
Operating Temperature Range (°C)	-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%	
Max. Operating Altitude (m)	4000	4000	4000	4000	4000	4000	4000	4000	≤4000	≤4000	
Cooling Method	Smart Fan Cooling							Fan Cooling			
User Interface	LED, LCD (Optional), WiFi + APP			LED, WiFi + APP			LED, LCD (Optional), WiFi + APP	LED, WiFi + APP			
Communication	RS485, WiFi or PLC (Optional)								RS485, WiFi, PLC (Optional)		
Weight (kg)	59.0	64.0	60.0	65.0	65.0	65.0	60.0	65.0	70.0	70.0	
Dimension (W × H × D mm)	586 × 788 × 264			586 × 788 × 267			586 × 788 × 264	586 × 788 × 267			
Topology	Non-isolated										
Self-consumption at Night (W)	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Ingress Protection Rating	IP65	IP65	IP65	IP65	IP65	IP65	IP65	IP65	IP65	IP65	
DC Connector	MC4 (4 ~ 6mm ²)		-	-	-	-	-	-	-	MC4 (4 ~ 6mm ²)	