

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



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	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	55	54.8	41.5	55	55	55
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)	
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)

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

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

*: Please visit GoodWe website for the latest certificates.