GMTH3-30KWE

Energy Storage Inverter Series

Three Phase | 3-30KW | Hybrid

- Support for Time-of-use Optimization
- Configurable Operation Modes
- AFCI (Optional) & Rapid Shutdown Ready

Built-in Anti-feed-in Function

Compact Size & Easy Installation

Smart Monitoring & Remote Hardware Upgrade

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Technical Data

PV Input	GMTH3KWE	GMTH4KWE	GMTH5KWE	GMTH6KWE	GMTH8KWE	GMTH10KWE
Max. DC Input Power (kW)	5	6	7.5	9	12	15
Max. PV Voltage (V)	1000					
Rated DC Input Voltage (V)	620					
DC Input Voltage Range (V)	150-1000					
MPPT Voltage Range (V)	150-850					
Full MPPT Range(V)	200-850			250-850	300-850	500-850
Start-up Voltage (V)	160					
Max. DC Input Current (A)	20x2					
Max. Short Current(A)	30x2					
No. of MPPT Tracker / Strings	2/2					
Battery Port	**GMTH3KWE**	**GMTH4KWE**	**GMTH5KWE**	**GMTH6KWE**	**GMTH8KWE**	**GMTH10KWE**
Battery Nominal Voltage (V)	200	200	200	250	300	400
Battery Voltage Range (V)	150-800					
Max. Charge/Discharge Current (A)	30					
Max. Charge/Discharge Power (kW)	3	4	5	6	8	10
Charging Curve	3 Stages					
Compatible Battery Type	Li-ion / Lead-acid / Sodium metal chloride battery					
AC Grid	**GMTH3KWE**	**GMTH4KWE**	**GMTH5KWE**	**GMTH6KWE**	**GMTH8KWE**	**GMTH10KWE**
Nominal AC Output Power (kW)	3	4	5	6	8	10
Max. AC Input/Output Power (kVA)	4.5 / 3.3	6 / 4.4	7.5 / 5.5	9 / 6.6	12 / 8.8	15 / 11
Max. AC Output Current (A)	5.3	7	8.5	10.5	13.5	17
Nominal AC Voltage (V)	230/400					
Nominal AC Frenquency (Hz)	50/60					
Power Factor	1（-0.8-0.8）adjustable					
Current THD (%)	<3%					
AC Load Output (Back-up)	**GMTH3KWE**	**GMTH4KWE**	**GMTH5KWE**	**GMTH6KWE**	**GMTH8KWE**	**GMTH10KWE**
Nominal Output Power (VA)	3000	4000	5000	6000	8000	10000
Nominal Output Voltage (V)	230/400					
Nominal Output Frequency (Hz)	50/60					
Nominal Output Current (A)	4.4	5.8	7.3	8.7	11.6	14.5
Peak Output Power	3300VA, 60s	4400VA, 60s	5500VA, 60s	6600VA, 60s	8800VA, 60s	11000VA, 60s
THDV (with linear load)	<3%					
Switching Time (ms)	<10					
Efficiency	**GMTH3KWE**	**GMTH4KWE**	**GMTH5KWE**	**GMTH6KWE**	**GMTH8KWE**	**GMTH10KWE**
Europe Efficiency	97.50%					
Max. Efficiency	98.00%				98.20%	
Battery Charge/Discharge Efficiency	98.00%					
Protection	**GMTH3KWE**	**GMTH4KWE**	**GMTH5KWE**	**GMTH6KWE**	**GMTH8KWE**	**GMTH10KWE**
Reverse Polarity Protection	Yes					
Over Current / Voltage Protection	Yes					
Anti-islanding Protection	Yes					
AC Short-ciruit Protection	Yes					
Leakage Current Detection	Yes					
Ground Fault Monitoring	Yes					
Grid Monitoring	Yes					
Enclosure Protect Level	IP65					
General Data	**GMTH3KWE**	**GMTH4KWE**	**GMTH5KWE**	**GMTH6KWE**	**GMTH8KWE**	**GMTH10KWE**
Dimensions (W x H x D, mm)	370 x 497 x 192 / 558 x 535 x 260 mm					
Weight (kg)	20.8 / 29kg					
Topology	Transformerless					
Cooling Concept	Natural Convection				Intelligent Fan	
Relative Humidity	0-100%					
Operating Temperature Range (°C)	-25 to 60 °C					
Operating Altitude (m)	<4000					
Noise Emission (dB)	<40					
Standby Consumption (W)	<5					
Display & Communication Interfaces	LCD, LED, RS485, CAN, Wi-Fi, GPRS, 4G					
Certification & Approvals	NRS097, G98/G99, EN50549-1, C10/C11, AS4777.2, VDE-AR-N4105, VDE0126, IEC62109-1, IEC62109-2					
EMC	EN61000-6-2, EN61000-6-3					

Technical Data

PV Input	GMTH12KWE	GMTH15KWE	GMTH17KWE	GMTH20KWE	GMTH25KWE	GMTH30KWE
Max. DC Input Power (kW)	18	22.5	25.5	30	37.5	45
Max. PV Voltage (V)	1000					
Rated DC Input Voltage (V)	620					
DC Input Voltage Range (V)	150-1000					
MPPT Voltage Range (V)	150-850					
Full MPPT Range(V)	500-850					
Start-up Voltage (V)	160					
Max. DC Input Current (A)	20x2	20+32	32x2		40x2	
Max. Short Current(A)	30x2	30+48	48x2		60x2	
No. of MPPT Tracker / Strings	2/2	2/3	2/4		2/4	

Battery Port	GMTH12KWE	GMTH15KWE	GMTH17KWE	GMTH20KWE	GMTH25KWE	GMTH30KWE
Battery Nominal Voltage (V)	450	500	400	500	500	550
Battery Voltage Range (V)	150-800					
Max. Charge/Discharge Current (A)	30	50	50	50	60	60
Max. Charge/Discharge Power (kW)	12	15	17	20	25	30
Charging Curve	3 Stages					
Compatible Battery Type	Li-ion / Lead-acid / Sodium metal chloride battery					

AC Grid	GMTH12KWE	GMTH15KWE	GMTH17KWE	GMTH20KWE	GMTH25KWE	GMTH30KWE
Nominal AC Output Power (kW)	12	15	17	20	25	30
Max. AC Input/Output Power (kVA)	18 / 13.2	22.5 / 16.5	25.5 / 18.7	30 / 22	37.5 / 27.5	45 / 33
Max. AC Output Current (A)	21.5	27	30	32	40	48
Nominal AC Voltage (V)	230/400					
Nominal AC Frenquency (Hz)	50/60					
Power Factor	1（-0.8-0.8）adjustable					
Current THD (%)	<3%					

AC Load Output (Back-up)	GMTH12KWE	GMTH15KWE	GMTH17KWE	GMTH20KWE	GMTH25KWE	GMTH30KWE
Nominal Output Power (VA)	12000	15000	17000	20000	25000	30000
Nominal Output Voltage (V)	230/400					
Nominal Output Frequency (Hz)	50/60					
Nominal Output Current (A)	17.4	21.8	24.7	29	36.3	43.5
Peak Output Power	13200VA, 60s	16500VA, 60s	18700VA, 60s	22000VA, 60s	27500VA, 60s	33000VA, 60s
THDV (with linear load)	<3%					
Switching Time (ms)	<10					

Efficiency	GMTH12KWE	GMTH15KWE	GMTH17KWE	GMTH20KWE	GMTH25KWE	GMTH30KWE
Europe Efficiency	97.50%		97.80%		98.00%	98.10%
Max. Efficiency	98.30%				98.50%	
Battery Charge/Discharge Efficiency	98.00%					

Protection	GMTH12KWE	GMTH15KWE	GMTH17KWE	GMTH20KWE	GMTH25KWE	GMTH30KWE
Reverse Polarity Protection	Yes					
Over Current / Voltage Protection	Yes					
Anti-islanding Protection	Yes					
AC Short-ciruit Protection	Yes					
Leakage Current Detection	Yes					
Ground Fault Monitoring	Yes					
Grid Monitoring	Yes					
Enclosure Protect Level	IP65					

General Data	GMTH12KWE	GMTH15KWE	GMTH17KWE	GMTH20KWE	GMTH25KWE	GMTH30KWE
Dimensions (W x H x D, mm)	370x497x192/558x535x260	558 x 535 x 260 mm				
Weight (kg)	20.8/29kg	29kg			36kg	
Topology	Transformerless					
Cooling Concept	Intelligent Fan					
Relative Humidity	0-100%					
Operating Temperature Range (°C)	-25 to 60 °C					
Operating Altitude (m)	<4000					
Noise Emission (dB)	<40					
Standby Consumption (W)	<5					
Display & Communication Interfaces	LCD, LED, RS485, CAN, Wi-Fi, GPRS, 4G					
Certification & Approvals	NRS097, G98/G99, EN50549-1, C10/C11, AS4777.2, VDE-AR-N4105, VDE0126, IEC62109-1, IEC62109-2					
EMC	EN61000-6-2, EN61000-6-3					

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