DMEGC

Single Phase

STORAGE SYSTEM

DMEGC H02

Features ▶

Extreme Performance

- 200% PV input;
- 200% backup overload capacity, 50A battery current;
- Max. efficiency 97%,Battery efficiency 95%;
- Balancing between battery modules helps to maximize capacity and service life;

Acitve Safe

- Build-in fire extinguisher controls fire in 10s;
- UPS-level switching time < 10ms;
- Battery auto-heating ensure use in cold climates;

Easy Installation

- All in one design, plug and play, easy to install;
- User-friendly monitoring by DMEGC Cloud / APP;
- Online monitoring, online diagnosis;

Flexible Configuration

- 10-41kWh expandable energy capacity;
- Max. 4 systems in parallel to increase power availability;
- Support DC-coupled, AC-coupled, Hybrid;

High Reliability

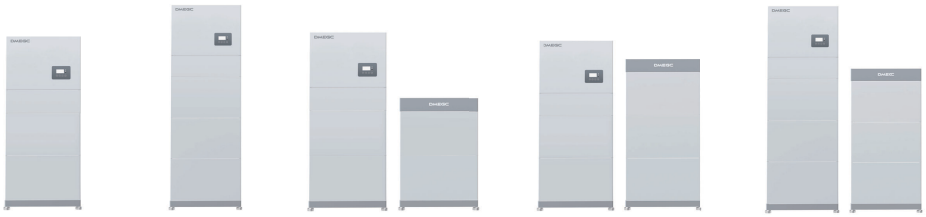
- Three-level software and two-level hardware battery protection;
- IP65 protection, suitable for outdoor use;
- Optional 10 years warranty;

Smart Management

- Internal EMS optimizes home energy supply automatically;
- Manage and control EV charger, Heat pump, and diesel generator;
- Built-in grid service, FCAS, VPP, etc.;

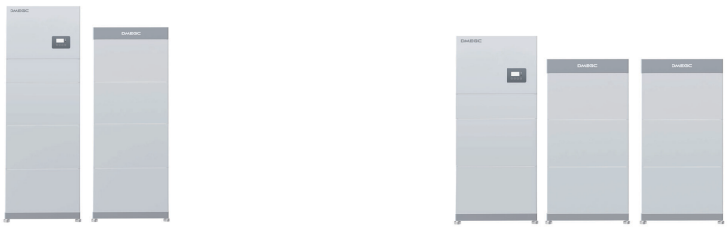
SYSTEM OVERVIEW

SYSTEM SCHEMATIC



Rated output power [kW]	3.6 / 5 / 6 / 8				
Number of batteries	2	3	4	5	6
Nominal capacity [kWh]①	10.24	15.36	20.48	25.6	30.72
Usable energy [kWh]②	9.72	14.59	19.46	24.32	29.18
Max. charge / discharge power [kW]③	5.12	7.68	8	8	8
Battery voltage range [V]	91-115	137-173	182-230	228-288	274-346
Degree of protection	IP65				
Operating temperature range [°C]	-20 to 57				
Allowable relative humidity range [%]	5-95 (No condensation)				
Max. operating altitude [m]	2000				
Net weight [kg]④	139	191	139 / 114	139 / 166	191 / 166
Dimension (W x H x D) [mm]	590 × 1330× 204	590 x 1663 x 204	590 × 1330 × 204/ 590 × 845 × 204	590× 1330 × 204/ 590 × 1179 × 204	590 × 1663 × 204/ 590 × 1179 × 204
Display	LCD				
Cooling concept	Natural cooling				
Topology	Transformerless				
Communication	RS485, CAN, LAN, Wi-Fi				

SYSTEM SCHEMATIC



Rated output power [kW]	3.6 / 5 / 6 / 8	
Number of batteries	7	8
Nominal capacity [kWh]①	35.84	40.96
Usable energy [kWh]②	34.05	38.91
Max. charge / discharge power [kW]③	8	8
Battery voltage range [V]	319-403	365-461
Degree of protection	IP65	
Operating temperature range [°C]	-20 to 57	
Allowable relative humidity range [%]	5-95 (No condensation)	
Max. operating altitude [m]	2000	
Net weight [kg]④	191 / 218	139 / 166 / 166
Dimension (W x H x D) [mm]	590× 1663 × 204/ 590 × 1513 × 204/	590× 1330 × 204/ 590 × 1179 × 204/ 590 × 1179 × 204
Display	LCD	
Cooling concept	Natural cooling	
Topology	Transformerless	
Communication	RS485, CAN, LAN, Wi-Fi	

① Test conditions: 25°C, 100% depth of discharge (DoD), 0.2C charge & discharge.
② System usable energy may vary with inverter different setting.
③ The max. charge/discharge power must not exceed the rated output power (the table takes the maximum power inverter as an example).
④ Different inverter models have different weights. The heaviest one is taken as an example.

SPECIFICATIONS

DMEGC

INVERTER MODEL	DM-INV-SPH3.6K	DM-INV-SPH5K	DM-INV-SPB5K	DM-INV-SPH6K	DM-INV-SPH8K
PV INPUT					
Max. recommended PV power [Wp]	7200	10000	N/A	10000	10000
Max. PV Input voltage [V]	580		N/A	580	
Nominal operating voltage [V]	360		N/A	360	
Max. input current per MPPT [A]	15 / 15		N/A	15/15	
Max. short circuit current per MPPT [A]	18.75 / 18.75		N/A	22.5 / 22.5	
MPPT voltage range ① [V]	100 ~ 550		N/A	100 ~ 550	
Start-up voltage [V]	90		N/A	90	
MPPT number	2		N/A	2	
Max. input strings per MPPT	1		N/A	1	
INPUT AC					
Nominal AC power [VA]	7200	10000	10000	11500	11500
Max. AC current [A]	32.0	43.5	43.5	50.0	50.0
Rated grid Frequency [Hz]	50 / 60				
Power factor	0.8 leading to 0.8 lagging				
OUTPUT AC(ON-GRID)					
Nominal AC power [VA]	3600		5000 (4600 VDE4105)	6000	8000
Max. apparent AC power [VA]	3600		5000 (4600 VDE4105)	6000	8000
Rated grid voltage (AC voltage range) [V]	L/N/PE, 230				
Rated grid Frequency [Hz]	50 / 60				
Grid voltage range [V]	170~270				
Rated AC Output Current [A]	15.7	21.7	21.7	26	34.7
Displacement power factor	0.8 leading to 0.8 lagging				
Total harmonic distortion (THDi, rated power) [%]	< 3				
OUTPUT AC(BACK-UP)					
Rated output power [VA]	3600	5000	5000	6000	8000
Max. Apparent Output Power [VA]	7200	10000	10000	11500	11500
Rated output voltage [V], Frequency [Hz]	L/N/PE, 230, 50/60				
Rated output current [A]	15.7	21.7	21.7	26	34.7
Switchover time [ms]	< 10				
Total harmonic distortion (THDv, linear Load) [%]	< 3				
BATTERY					
Battery voltage range [V]	91.2 ~ 460.8				
Communication interfaces	CAN / RS485				
BMS module	H02-MASTER				
Battery module	H02-SLAVE				
Composition	H02-MASTER + H02-SLAVE * n + Bases + Series Box（Required for ≥2 towers）				
Battery type	Li-ion (LFP)				
Nominal capacity [kWh] / Nominal capacity [Ah] ②	5.12 / 100				
Usable energy [kWh] ③	4.86				
Standard power [kW]	2.56				
Max power [kW]	2.56				
Recommend charge/discharge current [A]	50 / 50				
Max. charge / discharge current [A] ④	50 / 50				
Cycle life [Cycles]	6000				
Warranty [Years]	10				
Safety	IEC62619/IEC63056/IEC62477-1/62040-1/IEC60730				
Transportation	UN38.3				
H02-MASTER dimensions(W x H x D) [mm] / Weight [kg]	590 × 181 × 204 / 9.3				
H02-SLAVE dimensions(W x H x D) [mm] / Weight [kg]	590 × 333 × 204 / 52				
Base dimensions(W x H x D) [mm] / Weight [kg]	590 × 78 × 204 / 5				
Series box dimensions(W x H x D) [mm] / Weight [kg]	590 × 100 × 204 / 5				
EFFICIENCY					
Max. efficiency [%] / Euro-efficiency [%]	97 / 96.2				
Rated battery charge [%] / Discharge efficiency [%]	98.5 / 97				
GENERAL DATA (INVERTER)					
Dimensions (W x H x D) [mm]	590 × 405 × 205				
Weight [kg]	19.5	19.5	17.5	20.5	21
Operating temperature range [°C]	-25 ~ +60 (derating above 45°C)				
Ingress protection	IP65				
Relative humidity [%]	5 to 95 (No condensation)				

SPECIFICATIONS

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INVERTER MODEL	DM-INV-SPH3.6K	DM-INV-SPH5K	DM-INV-SPB5K	DM-INV-SPH6K	DM-INV-SPH8K
GENERAL DATA (INVERTER)					
Storage temperature [°C]	-40 ~ +65				
Noise emission (typical) [dB(A)]	< 30				< 45
PROTECTION					
Anti-Islanding Protection	Integrated				
Insulation Resistor Detection	Integrated				
Residual Current Monitoring Unit	Integrated				
Output Over Current Protection	Integrated				
Output Short Protection	Integrated				
Output Overvoltage Protection	Integrated				
DC Reverse Polarity Protection	Integrated				
PV Overvoltage Protection	Integrated				
PV Switch	Integrated				
Battery Breaker	Integrated				
STANDARD					
Safety	IEC62109-1 / IEC62109-2				
EMC	EN 61000-6-1 / EN 61000-6-2 / EN 61000-6-3				
Grid Regulation	VDE-AR-N 4105, G98/G99, C10/11, NTS 631, RD1699, CEI 0-21, VDE 0126, NRS 097-2-1, MEA, PEA, AS/NZS 4777.2, EN 50549-1				
FEATURES					
PV Connection	Vaconn D4 connectors				
Grid Connection	Plug in connector				
Back-up Connection	Plug in connector				
BAT Connection	Screw terminal				
Warranty[Years]	10				

Note: Specifications are subject to change without advance notice.

Made In China

① Any DC input voltage beyond the MPPT voltage range may result in inverter improper operating.
② Test conditions: 25°C, 100% depth of discharge (DoD), 0.2C charge & discharge.
③ System usable energy may vary with inverter different setting.
④ Discharge: In case of battery cell's temperature range of -20°C~10°C and 45°C~53 °C, the discharge current will be reduced; Charge: In case of battery cell's temperature range of 0°C~25°C and 45°C~53°C, the charge current will be reduced. Product charge or discharge power depends on the actual temperature of battery pack.

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