



Three-phase AC-coupled Inverter Datasheet

HAT-5.0HV-EUG1
HAT-6.0HV-EUG1
HAT-8.0HV-EUG1
HAT-10.0HV-EUG1

Description

The HAT-HV-EUG1 Series is designed for retrofitting PV systems, including power classes ranging from 5 kW to 10 kW. It can be installed with existing PV inverters, forming an AC coupling system.

The intelligent EMS function supports self-consumption mode, economic mode, and backup mode for multi-scenario applications.

Moreover, the remote monitoring management through S-Miles Cloud allows users to track the full status of the system operation over time, maximizing power and energy utilization.

Features

- 01 Intelligent export limitation and 100% three-phase imbalanced output
- 02 Compatible with multiple batteries, providing users with more choices
- 03 UPS level switching time <10 ms

- 04 Ultralight for easy installation and space-saving
- 05 Built-in dry contact flexibly set to earth fault alarm, load control or generator control
- 06 Max. 10 parallel inverters

Technical Specifications

Model	HAT-5.0HV-EUG1	HAT-6.0HV-EUG1	HAT-8.0HV-EUG1	HAT-10.0HV-EUG1
Battery				
Battery Type	Li-ion			
Nominal Battery Voltage (V)	500			
Voltage Range (V)	170-600			
Max. Charge Current (A)	20	20	30	30
Max. Discharge Current (A)	20	20	30	30
Max. Power (W)	5000	6000	8000	10000
Charging Strategy	Self-adaption to BMS			
AC Input and Output (On-grid)				
Nominal Output Apparent Power (VA)	5000	6000	8000	10000
Max. Output Apparent Power (VA)	5500	6600	8800	11000
Max. Input Apparent Power (VA)	10000	12000	16000	16000
Nominal AC Voltage (V)	400/380, 3L/N/PE			
Nominal Grid Frequency (Hz)	50/60			
Max. Output Current (A)	8.3	10.0	13.3	16.7
Max. Input Current (A)	15.2	18.2	24.2	24.2
Power Factor	0.8 leading ... 0.8 lagging			
Total Harmonic Distortion (@nominal output)	< 3%			
AC Output (Off-grid)				
Max. Output Apparent Power (VA)	5000	6000	8000	10000
Peak Output Apparent Power (VA)	10000, 10s	12000, 10s	16000, 10s	16000, 10s
Nominal AC Voltage (V)	400/380, 3L/N/PE			
Nominal AC Frequency (Hz)	50/60			
Max. Output Current (A)	8.3	10.0	13.3	16.7
Total Harmonic Distortion (@ linear load)	< 3%			
Efficiency				
Max. Efficiency	97.5%	97.5%	97.5%	97.5%
Protection				
Anti-islanding Protection	Integrated			
AC Over Current Protection	Integrated			
AC Short Current Protection	Integrated			
AC Overvoltage and Undervoltage Protection	Integrated			
Surge Protection	DC Type II / AC Type III			
General				
Dimensions (W × H × D [mm])	502 × 486 × 202			
Weight (kg)	23			
Mounting	Wall Mounting			
Operating Temperature Range (°C)	-25 to + 65 (> 45, derating)			
Relative Humidity	0-95%, no condensing			
Altitude (m)	< 2000			
Cooling	Natural Convection			
Protection Degree	IP65			
Noise (dB [A])	< 40			
User Interface	LED & App			
Communication with BMS	RS485, CAN			
Communication with Meter	RS485			
Communication Interface	RS485, Wi-Fi/Ethernet/4G (optional)			
Digital Input / Output	DRM, 1 × DI, 2 × DO			
Isolation Method (Battery)	Transformerless			
Certifications and Standards				
Grid Regulation	EN 50549, VDE-AR-N 4105, AS/NZS 4777.2, VFR: 2019, TOR Erzeuger Type A			
Safety Regulation	IEC 62109-1, IEC 62109-2, IEC 62477-1			
EMC	EN 61000-6-1, EN 61000-6-3			