



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 5.0 kW to 10.0 kW. It can be installed with existing PV inverters, forming an AC coupling system.

The intelligent EMS function supports self-consumption mode, economical 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			
Battery voltage range (V)	170-600			
Max. charge/discharge current (A)	20/20	20/20	30/30	30/30
Max. charge/discharge power (W)	5000/5000	6000/6000	8000/8000	10000/10000
Charging strategy for Li-ion battery	Self-adaption to BMS			
Communication	CAN			
AC Input and Output (On-grid)				
Rated output power (W)	5000	6000	8000	10000
Max. output apparent power (VA)	5500	6600	8800	11000
Max. input power (W)	10000	12000	16000	16000
Grid form	3L/N/PE			
Rated AC output voltage/Range (V)	380/400, 266-480			
Rated 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	>0.99 (0.8 leading ... 0.8 lagging)			
THDi (@rated output)	<3%			
AC Output (Off-grid)				
Rated output power (W)	5000	6000	8000	10000
Max. output apparent power (VA)	10000, 10s	12000, 10s	16000, 10s	16000, 10s
Back-up switch time (ms)	<10			
Grid form	3L/N/PE			
Rated output voltage (V)	380/400			
Rated output frequency (Hz)	50/60			
Max. continuous output current (A)	8.3	10.0	13.3	16.7
THDv (@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 (°C)	-25 to +65 (>45, derating)			
Relative humidity	0-95%, no condensing			
Cooling	Natural convection			
Topology (Battery)	Transformerless			
Altitude (m)	≤2000			
Protection degree	IP65			
Noise (dB)	<40			
User interface	LED, App			
Digital input/output	DRM, 1 × DI, 2 × DO			
Communication	RS485, optional: Wi-Fi/Ethernet/4G ⁽¹⁾			
Certifications and Standards				
Grid connection standard	EN 50549, VDE-AR-N 4105, AS/NZS 4777.2, VFR: 2019, TOR Erzeuger Type A			
Safety/EMC standard	IEC 62109-1/-2, IEC 62477-1, EN 61000-6-1/-3			

(1) The DTS-4G solution will be coming soon.