Single-phase AC-coupled Inverter Datasheet

HAS-3.0LV-EUG1
HAS-3.6LV-EUG1
HAS-4.6LV-EUG1
HAS-5.0LV-EUG1

Description

The HAS-LV-EUG1 Series is designed for retrofitting PV systems, including power classes ranging from 3 kW to 5 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 Max. Efficiency 95.2%

02 Ultralight for easy installation and space-saving

03 Compatible with any grid-tied PV system

04 Built-in dry contact flexibly monitors earth fault alarm and provides load control or generator control

05 The intelligent EMS has self-consumption, economic and backup modes, offering multi-scenario solutions for daily life

06 Remote monitoring through S-Miles Cloud

hoymiles.com
sales@hoymiles.com

Technical Specifications

Model	HAS-3.0LV-EUG1	HAS-3.6LV-EUG1	HAS-4.6LV-EUG1	HAS-5.0LV-EUG1
Battery				
Battery Type	Li-ion / Lead-acid			
Nominal Battery Voltage (V)	48			
Voltage Range (V)	40-60			
Max. Charge Current (A)	75	90	100	100
Max. Discharge Current (A)	75	90	100	100
Max. Power (W)	3000	3600	4600	5000
Charging Strategy for Li-ion Battery	Self-adaption to BMS			
Charging Curve	3 Stages / Equalization			
External Temperature Sensor	Optional			
AC Input and Output (On-grid)				
Nominal Output Apparent Power (VA)	3000	3680	4600	5000[1]
Max. Output Apparent Power (VA)	3000	3680	4600[2]	5000[1] [2]
Max. Input Apparent Power (VA)	6000	7360	7360	7360
Nominal AC Voltage (V)	230			
Nominal Grid Frequency (Hz)	50 / 60			
Max. Output Current (A)	13.0	16.0	20.0	21.7
Max. Input Current (A)	26.1	32.0	32.0	32.0
Power Factor	0.8 leading ... 0.8 lagging			
Total Harmonic Distortion (@ nominal output)	< 3%			
AC Output (Off-grid)				
Max. Output Apparent Power (VA)	3000	3680	4600	5000
Peak Output Apparent Power (VA)	3300, 10s	4048, 10s	5060, 10s	5500, 10s
Nominal AC Voltage (V)	230			
Nominal AC Frequency (Hz)	50 / 60			
Max. Output Current (A)	13.0	16.0	20.0	21.7
Total Harmonic Distortion (@ linear load)	< 3%			
Efficiency				
Max. Efficiency	95.2%	95.2%	95.2%	95.2%
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			

Technical Specifications

Model	HAS-3.0LV-EUG1	HAS-3.6LV-EUG1	HAS-4.6LV-EUG1	HAS-5.0LV-EUG1
General				
Dimensions (W × H × D [mm])	502 × 461 × 202			
Weight (kg)	21			
Mounting	Wall Mounting			
Operation Temperature (°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)	High-frequency Isolation			
Certifications and Standards				
Grid Regulation	EN 50549, VDE-AR-N 4105, AS/NZS 4777.2			
Safety Regulation	IEC 62109-1, IEC 62109-2, IEC 62477-1			
EMC	EN 61000-6-1, EN 61000-6-3			

(1) 4600 for VDE-AR-N 4105 & VDE0126-1-1; 4999 for AS/NZS 4777.2
(2) Max. output apparent power 3680 VA for TOR Erzeuger Type A