



# Three-phase Hybrid Inverter Datasheet

HYT-5.0HV-EUG1 HYT-6.0HV-EUG1 HYT-8.0HV-EUG1 HYT-10.0HV-EUG1 HYT-12.0HV-EUG1

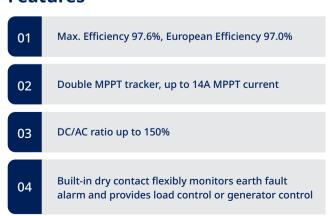
### **Description**

The HYT-HV Series is a high-performance three-phase hybrid inverter with excellent reliability, including power classes ranging from 5 kW to 12 kW.

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

Monitoring management through S-Miles Cloud allows users to remotely diagnose and track the individual system's performance over time, offering superior energy production.

#### **Features**





## **Technical Specifications**

Model	HYT-5.0HV-EUG1	HYT-6.0HV-EUG1	HYT-8.0HV-EUG1	HYT-10.0HV-EUG1	HYT-12.0HV-EUG		
Battery							
Battery Type			Li-ion				
Nominal Battery Voltage (V)			500				
Voltage Range (V)	170-600						
Max. Charge Current (A)	20	20	30	30	30		
Max. Discharge Current (A)	20	20	30	30	30		
Rated Power (W)	5000	6000	8000	10000	10000		
Charging Strategy	Self-adaption to BMS						
PV Input							
Max. PV Input Power (W)	7500	9000	12000	15000	15000		
Max. PV Input Voltage (V)			1000				
Nominal Input Voltage (V)	720						
MPPT Voltage Range (V)	200-950						
Start-up Voltage (V)	250						
Number of MPPTs	2	2	2	2	2		
Max. Number of PV String per MPPT	1/1	1/1	1/1	1/2	1/2		
Max. PV Input Current (A)	14/14	14/14	14/14	14/28	14/28		
Short-circuit Current of PV Input (A)	17/17	17/17	17/17	17/34	17/34		
AC Input and Output (On-grid)							
Nominal Output Apparent Power (VA)	5000	6000	8000	10000	12000		
Max. Output Apparent Power (VA)	5500	6600	8800	11000	12000		
Max. Input Apparent Power (VA)	10000	12000	16000	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	17.4		
Max. Input Current (A)	15.2	18.2	24.2	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	12000		
Peak Output Apparent Power (VA)	10000, 10s	12000, 10s	16000, 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	17.4		
Total Harmonic Distortion (@linear load)			<3%				

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Efficiency									
Max. Efficiency	97.6%	97.6%	97.6%	97.6%	97.6%				
Euro Efficiency	97.0%	97.0%	97.0%	97.0%	97.0%				
Max. Battery to Load Efficiency	97.5%	97.5%	97.5%	97.5%	97.5%				
MPPT Efficiency	99.9%	99.9%	99.9%	99.9%	99.9%				
Protection									
Anti-islanding Protection	Integrated								
PV String Input Reverse Polarity Protection	Integrated								
Insulation Resistor Detection	Integrated								
Residual Current Monitoring Unit	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									
Dimension (W × H × D) [mm]	502 × 486 × 202								
Weight (kg)	26.5								
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 (Solar/Battery)	Transformerless / Transformerless								
Certifications and Standards									
Grid Regulation	EN 50549, VDE-AR-N 4105, AS/NZS 4777.2								
Safety Regulation		IEC 62109-1, IEC 62109-2							
EMC	EN 61000-6-1, EN 61000-6-3								