



# HY3 SERIES

Three-phase hybrid inverter with advanced performance and excellent reli-

# High-performance and smart hybrid inverter for your house

The *HY3* Series is a high performance three-phase hybrid inverter with excellent reliability, rated from 5kW to 10kW.

In a *HY3* Series hybrid system, surplus solar energy will be stored in battery for later use, to enhance self-consumption of solar energy. With battery, it can also act as a backup power supply with full backup power, to supply loads in a grid blackout.

The *HY3* Series cooperates with high voltage lithium battery systems. Thanks to higher battery voltage, the inverter's efficiency is greatly improved, and larger battery systems are available to meet growing demand for system capacity.

The battery charge/discharge current reaches up to 50A, which can give full play to most batteries within a wide voltage range (200-500V), whether under on-grid or off-grid conditions.

The *HY3* Series is designed with no external fan, extending its trouble free operation time. It adopts heat sink with strong heat dissipation capability, ensuring long lifetime operation.

One can monitor, operate, set and update *HY3* Series inverter remotely through hoymiles APP/web portal, greatly improving user experience.

## Features



High Efficiency



Plug and Play



High Voltage Battery



Full Backup Power



Free Convection,  
Quiet Operation



IP65, For Outdoor Use



Everything through  
Mobile APP

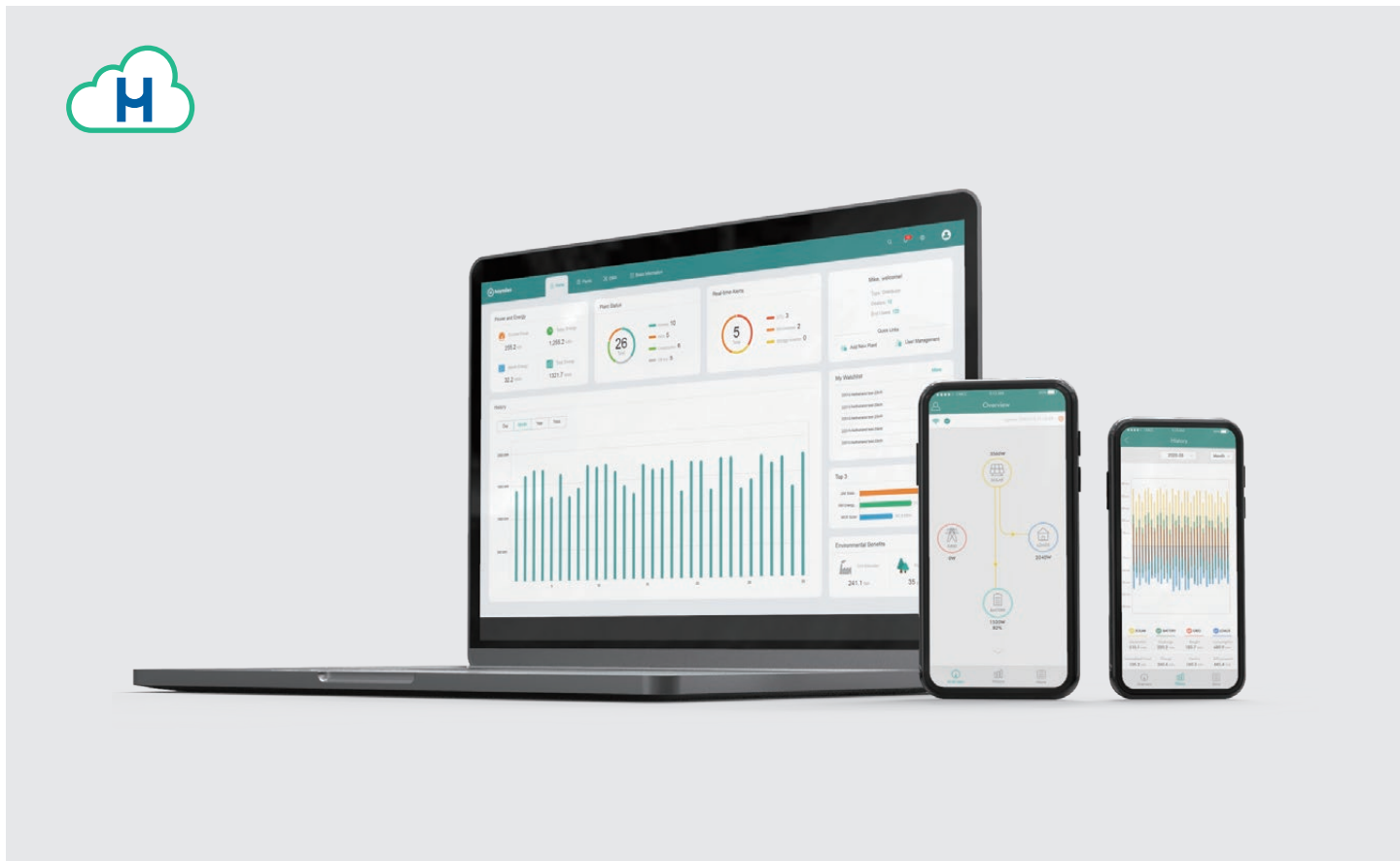


# Specification

	HY3-5000HV	HY3-6000HV	HY3-8000HV	HY3-10000HV
<b>INPUT (DC)</b>				
Max. recommended DC power [W]	6000	8000	10000	13000
Max. DC voltage [V]	1000	1000	1000	1000
Nominal DC operating voltage [V]	720	720	720	720
Max. input current [A]	11/11	11/11	11/11	11/20
Max. short circuit current [A]	14/14	14/14	14/14	14/23
MPPT voltage range [V]	230~800	280~800	370~800	330~800
Number of MPPT trackers	2	2	2	2
String per MPPT tracker	1	1	1	1/2
<b>OUTPUT (AC)</b>				
Nominal AC power [VA]	5000	6000	8000	10000
Max. AC power [VA]	5000	6000	8000	10000
Rated grid voltage/AC voltage range [V]	400(360~440)	400(360~440)	400(360~440)	400(360~440)
Rated frequency of grid [Hz]	50/60	50/60	50/60	50/60
Nominal AC current [A]	7.6	9	12.2	15
Max. AC current [A]	8.5	10	13.5	16
Displacement power factor	0.8 leading ... 0.8 lagging			
Total harmonic distortion [%]	<2 @ rated power			
Parallel operation	Yes			
Load control	Yes (optional)			
<b>OUTPUT DC (BATTERY)</b>				
Battery voltage range [V]	170~500			
Recommended battery voltage [V]	200	240	320	400
Max. charging/discharging power [W]	6000	8000	10000	10000
Max. charging/discharging current [A]	50			
Communication interfaces	CAN/RS485			
Reverse connect protection	Yes			
<b>EPS OUTPUT (WITH BATTERY)</b>				
EPS rated power [VA]	5000	6000	8000	10000
EPS rated voltage [V]; Frequency [Hz]	400/380, 50/60	400/380, 50/60	400/380, 50/60	400/380, 50/60
EPS rated current [A]	7.2	8.7	11.6	14.5
EPS peak power [W]; Duration [s]	7500, 60	9000, 60	12000, 60	14000, 60
Switch time [s]	<0.5			
Total harmonic distortion [%]	<0.2 with linear load			
<b>EFFICIENCY</b>				
MPPT efficiency [%]	99.9			
Euro efficiency [%]	96.5			
Max. efficiency [%]	97.2			
Battery charge/discharge efficiency [%]	98.2 (PV-BAT) 96.6 (BAT-AC)			
<b>POWER CONSUMPTION</b>				
Standby consumption(night) [W]	<7			
Idle mode	YES			
<b>STANDARD</b>				
Safety	IEC62109-1-2 / IEC62040/ AS3100			
EMC	EN61000-6-1/EN61000-6-2/EN61000-6-3			
Certifications	VDE0126-1-1 A1:2012/VDE-AR-N4105/G59-3/AS4777/EN50438/CEI 0-21/IEC62040/IEC62619/ISO13849-2/SN29500/IEC615086			
<b>ENVIRONMENT LIMIT</b>				
Protection class	IP65			
Operating temperature [oC]	-25 to +60 (derating at+45)			
Altitude [m]	<2000 (>2000, derating)			
Storage temperature [oC]	-20 to +60			
Noise emission(typical) [dB]	<30			
Over voltage category	III (electric supply side), II (PV side)			
<b>GENERAL</b>				
Dimensions(WxHxD) [mm]	482*760*250			
Weight [kg]	40	40	45	50
Cooling concept	Natural			
Topology	Transformerless			
Communication	Ethernet, Meter, WIFI (optional), RF(optional), DRM, USB, ISO alarm, Parallel operation			
LCD display	Backlight 20*4 character			
Standard warranty [years]	5~10			

NOTE: Further modification may not notify.

# Hoymiles Cloud 2.0



Hoymiles Cloud is a remote platform for monitoring, operation, settings, update, and etc.

Latest Hoymiles Cloud 2.0 is coming, with more powerful functions, redesigned frameworks, and all-new interfaces.

For end users, it is a easy way to monitor, operate, and set the inverter anytime and anywhere.

For distributors/installers, it can realize remote O&M, reducing aftersales cost and improving the user experience.