

ALPS Series Hybrid Inverter 3.6/4.6/5.0/6.0kW



Designed to offer an **economical** solution with **premium functionality**, the hybrid inverter combines the benefits of grid-tied and off-grid systems, allowing you to **optimize** your energy usage and **save cost** while ensuring reliable power supply.

MEET THE POLAR ESS HYBRID INVERTER.

- A solar inverter and a battery inverter in one unit
- 3.6-8.0kW power capacity options, to meet your power needs
- Displays key info like charging/discharging voltage and current





SCALABLE

Supports multiple parallel operations, so you can scale as you like.



ECONOMICAL

Seriously high cost-performance ratio, featuring 2MPPTs, wide PV voltage range and LCD display.



LINKABLE

Connect your third-party devices via dry contact or DI port.



AFFORDABLE

Coming to you at 50-60% of the cost of the industry heavies.

Model	ALPS HY3.6-GL	ALPS HY4.6-GL	ALPS HY5.0-GL	ALPS HY6.0-GL
Input Data (PV)				
Max. PV Input Power	5400W	7000W	7500W	9000W
Start-up Voltage	90V			
Max. PV Open-circuit Voltage	550V			
MPPT Voltage Range	90V-530V			
Rated MPPT Voltage	360V			
Max. PV Short-circuit Current	2*23A			
Max. PV Input Current	17A/17A			
MPPT Tracker/No. of Strings per MPPT Tracker	2 / 1			
Battery				
Battery Type	Lead-acid or Li-ion			
Battery Voltage Range	46.7-57.6V			
Nominal Voltage	51.2V			
Max. Charging/Discharging Current	83A/83A	104A/104A	112A/112A	130A/130A
Max. Battery Charging/Discharging Power	4000W/4000W	5000W/5000W	5400W/5400W	6500W/6500W
Battery Communication	RS485 / CAN			
Output Data (AC)				
Rated AC Output Power	3600W	4600W	5000W	6000W
Rated/Max. Apparent Power	3600VA	4600VA	5000VA	6000VA
Rated/Max. Output Current	16Aa.c.	20Aa.c.	21.7Aa.c.	26Aa.c.
Nominal Grid Voltage/Range	230V / 180-270V			
Nominal Frequency/Range	50 / 60Hz; ±5Hz			
Power Factor(@Full Load)	>0.99			

Power Factor Range	0.8 Lagging - 0.8 Leading			
THDI (@Rated Power)	<3%			
AC Output Topology	Single Phase			
Backup				
Nominal EPS Output Power	3600W	4600W	5000W	6000W
EPS Peak Power (10s)	7200VA	9200VA	10000VA	12000VA
AC Nominal Voltage	230Va.c.			
Rated/Max. Output Current	16Aa.c.	20Aa.c.	21.7Aa.c.	26Aa.c.
Nominal Frequency	50 Hz			
Automatic Switch Time	≤10ms			
THDV (Linear Load)	<3%			
General Data				
Battery Max. Charging/Discharging Efficiency	94% / 94%			
PV to AC Max. Efficiency	97.00%			
Euro Efficiency	96.5%			
MPPT Efficiency	99.90%			
Ingress Protection	IP20			
Protective Class	I			
Overvoltage Category	PV: II, Battery: II, AC: III			
Inverter Topology	PV: Transformer-less; Battery: Isolated			
Cooling	Forced Air Cooling			
Noise Emission (Typical)	<45dB			
Operating Temperature Range	-25 ~ 60 C			
Full Load Operation Temperature	-25 ~ 45 C			
Relative Humidity	0~100%, Non-condensing			
Max. Altitude	4000m (Derating above 2000m)			
Dimensions (W×H×D)	455mm×425mm×190mm			
Weight	22kg			
Self-consumption	10W			
Display	LCD / LED			

Interface

Communication with Meter - Pluggable Connector
Communication with Portal - Wi-Fi (USB)

Warranty

3 Years

Certificates

CE, UKCA, G98, G99, EN50549, C10/11, VDE-N4105, NTS2.1, UNE217001, NRS097, AS4777.2

