

# HYD 3000~6000-EP

3000 / 3680 / 4000 / 4600 / 5000 / 5500 / 6000 W

## SINGLE-PHASE ENERGY STORAGE INTEGRATED INVERTER



### Product advantages

- Various operational modes available
- Smart fanless cooling design
- Flexible configuration, allowing both lead-acid and lithium batteries
- EPS function (switchover time less than 10 ms)
- Feed-in limitation function
- Supports both on- and off-grid operation
- IP65 design for outdoor



Model	HYD 3000-EP	HYD 3680-EP	HYD 4000-EP	HYD 4600-EP	HYD 5000-EP	HYD 5500-EP	HYD 6000-EP
<b>PV Input</b>							
Commended Max. PV Power	4500Wp	5400Wp	6000Wp	6900Wp	7500Wp	7500Wp	9000Wp
Max. Input Voltage	600 Vd.c.						
Start-up Voltage	100 Vd.c.						
Rated Input Voltage	360 Vd.c.						
MPPT Voltage Range	90-550 Vd.c.						
Number of MPPT Trackers	1/1						
Max. Input Current	13/13 A						
Max. Isc	18/18 A						
<b>Battery</b>							
Voltage Range	42-58 Vd.c.						
Number of Battery Input Channels	1						
Max. Charging Power	3.75 kW	4 kW	4.25 kW	5 kW	5 kW	5 kW	5 kW
Max. Discharging Power	3.75 kW	4 kW	4.25 kW	5 kW	5 kW	5 kW	5 kW
Max. Charging Current	75 A	80 A	85 A	100 A	100 A	100 A	100 A
Max. Discharging Current	75 A	80 A	85 A	100 A	100 A	100 A	100 A
Battery Type <sup>[1]</sup>	Lithium-ion & Lead-acid						
BMS Communication	CAN/RS485						
<b>AC Input (Grid)</b>							
Rated Input Voltage	L+N+PE, 230 V.a.c.						
Rated Input Frequency	50/60 Hz						
Max. Input Current	29.3 A	33.4 A	35.9 A	41.7 A	43.5 A	43.5 A	43.5 A
<b>AC Output (Backup)</b>							
Rated Output Voltage	L+N+PE, 230 V.a.c.						
Rated Output Frequency	50/60 Hz						
Rated Output Power	3 kW	3.68 kW	4 kW	4.6 kW	5 kW	5 kW	5 kW
Rated Output Current	13.0 A	16.0 A	17.4 A	20.0 A	21.7 A	21.7 A	21.7 A
Rated Apparent Power	3 kVA	3.68 kVA	4 kVA	4.6 kVA	5 kVA	5 kVA	5 kVA
Max. Apparent Power	3 kVA	3.68 kVA	4 kVA	4.6 kVA	5 kVA	5 kVA	5 kVA
Max. Output Current	13.0 A	16.0 A	17.4 A	20.0 A	21.7 A	21.7 A	21.7 A
Peak Output Apparent Power	4500VA, 30s	4800VA, 30s	5100VA, 30s	6000VA, 30s	6000VA, 30s	6000VA, 30s	6000VA, 30s
THDv (@ linear load)	<3%						
Switching Time	10ms default						
<b>AC Output (Grid)</b>							
Rated Output Voltage	L+N+PE, 230 V.a.c.						
Rated Output Frequency	50/60 Hz						
Rated Output Power	3 kW	3.68 kW	4 kW	4.6 kW	5 kW	5 kW	6 kW
Rated Output Current	13.0 A	16.0 A	17.4 A	20.0 A	21.7 A	21.7 A	26.1 A
Max. Apparent Power	3.3 kVA	3.68 kVA	4.4 kVA	4.6 kVA	5 kVA	5.5 kVA	6 kVA
Max. Output Current	14.3 A	16.0 A	19.1 A	20.0 A	21.7 A	23.9 A	26.1 A
THDI	<3%						
Power Factor Range	0.8 lagging-0.8 leading						
<b>Efficiency</b>							
Max. MPPT Efficiency	99.9%						
Max. Efficiency	97.6%	97.6%	97.6%	97.8%	97.8%	97.8%	98.0%
European Efficiency	97.2%	97.2%	97.2%	97.3%	97.3%	97.3%	97.5%
Max. efficiency of Charging/Discharging <sup>[2]</sup>	94.6%						
<b>Protection</b>							
DC Switch	Yes						
PV Reverse Connection Protection	Yes						
Output Short Circuit Protection	Yes						
Output Overcurrent Protection	Yes						
Output Overvoltage Protection	Yes						
Insulation Impedance Detection	Yes						
Residual Current Detection	Yes						
Anti-island Protection	Yes						
Surge protection	PV: Type III, AC: Type III						
<b>General Parameter</b>							
Inverter Topology	High-frequency Isolation (For Battery)						
Protective class	Class I						
IP Rating	IP65						
Overvoltage Category	AC III, DC II						
Operating Temperature Range	-30°C~+60°C (derating above +45°C)						
Relative Humidity Range	5%-95%						
Max. Operating Altitude	4000m (derating above 2000m)						
Standby Self-consumption <sup>[3]</sup>	<10W						
Installation Method	Wall Mounted						
Dimensions (W*H*D)	482*503*183mm						
Cooling Mode	Natural						
Weight	21.5kg						
Communication	CAN/RS485/Wi-Fi, Optional: 4G/LAN						
Display	LCD & APP						

[1] Please refer to document "SOFAR inverter Model compatible battery list"

[2] Battery-AC maximum efficiency of battery charge and discharge

[3] Standby loss at rated input voltage

\*All specifications are subject to change without notice.