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
PV Input							
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						
Battery							
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 [1]	Lithium-ion & Lead-acid						
BMS Communication	CAN/RS485						
AC Input (Grid)							
Rated Input Voltage	L+N+PE, 230 Va.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
AC Output (Backup)							
Rated Output Voltage	L+N+PE, 230 Va.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						
AC Output (Grid)							
Rated Output Voltage	L+N+PE, 230 Va.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						
Efficiency							
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 [2]	94.6%						
Protection							
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						
General Parameter							
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 [3]	<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.