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
DC input (PV)							
Recommended max. PV input power	4500Wp	5400Wp	6000Wp	6900Wp	7500Wp	7500Wp	9000Wp
Max. input voltage	600V						
Start-up voltage	100V						
Rated input voltage	360V						
MPPT operating voltage range	90-550V						
Number of MPP trackers	2						
Max. number of input strings per MPPT	1/1						
Max. input current per MPPT	13A/13A						
Max. short-circuit current per MPPT	18A/18A						
AC output (on-grid)							
Rated output power	3000W	3680W	4000W	4600W	5000W	5000W	6000W
Rated output current	13A	16A	17.4A	20A	21.7A	21.7A	26.1A
Rated grid voltage	L/N/PE, 230V						
Rated grid frequency	50/60Hz						
Max. output apparent power	3300VA	3680VA	4400VA	4600VA	5000VA	5500VA	6000VA
Max. output current	15A	16A	20A	20.9A	21.7A	25A	27.3A
THDi	<3%						
Power factor	1 (adjustable:+/-0.8)						
Battery parameters							
Battery type[3]	Lithium-ion, Lead-acid						
Battery voltage range	42-58V						
Number of battery input channels	1	1	1	1	1	1	1
Max. charge/discharge power	3750W	4000W	4250W	5000W	5000W	5000W	5000W
Max. charge/discharge current	75A	80A	85A	100A	100A	100A	100A
BMS communication mode	CAN, RS485						
AC output (off-grid)							
Rated output power	3000W	3680W	4000W	4600W	5000W	5000W	5000W
Rated output current	13A	16A	17.4A	20A	21.7A	21.7A	21.7A
Rated output voltage	L/N/PE, 230V						
Rated output frequency	50/60Hz						
Max. output apparent power	3000VA	3680VA	4000VA	4600VA	5000VA	5000VA	5000VA
Peak output apparent power, time	4500VA, 30s	4800VA, 30s	5100VA, 30s	6000VA, 30s	6000VA, 30s	6000VA, 30s	6000VA, 30s
Max. output current	13.6A	16A	18.2A	20.9A	22.7A	22.7A	22.7A
THDv (@ linear load)	<3%						
Switching time	10ms default						
Efficiency							
Max. MPPT efficiency	99.9%						
Max. efficiency	97.6%	97.6%	97.6%	97.8%	97.8%	97.8%	98%
European efficiency	97.2%	97.2%	97.2%	97.5%	97.5%	97.5%	97.5%
Max. efficiency of charging/discharging [1]	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-islanding protection	Yes						
Surge protection	PV: Type III, AC: Type III						
General parameters							
Operating temperature range	-30°C~+60°C (Above 45°C derating)						
Relative humidity range	5%~95%						
Max. operating altitude	4000m						
Standby self-consumption [2]	<10W						
Topology	High frequency isolation (for battery)						
Installation method	Wall-mounted						
Degree of protection	IP65						
Dimensions (W*H*D)	482*503*183mm						
Cooling mode	Natural						
Weight	21.5kg						
Communication	RS485/CAN/WiFi, Optional: Ethernet/4G						
Display	LCD & APP+Bluetooth						
Standard	EN 61000-6-2, EN 61000-6-3, EN 61000-3-2, EN 61000-3-3, EN 61000-3-11, EN 61000-3-12, IEC 62109-1/2, IEC 62116, IEC 61727, IEC 61683, IEC 60068(1,2,14,30), VDE-AR-N 4105, VDE V 0126-1-1, AS/NZS 4777, CEI 0-21, G98/G99, TR321, TR322, EN 50438/EN50549, NRS 097-2-1, UNE 206 007-1						

[1] Battery-AC maximum efficiency of battery charge and discharge [2] Standby loss at rated input voltage [3]Please refer to document "SOFAR inverter Model compatible battery list"

*All specifications are subject to change without notice.