

# HYD 3000~6000-EP

5000 / 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



Datasheet	HYD 5000-EP	HYD 6000-EP
<b>DC input (PV)</b>		
Recommended Max. PV input power	7500Wp	9000Wp
Max. input voltage		600V
Start-up voltage		100V
Rated input voltage		360V
MPPT operating voltage range		90-550V
Number of MPPT		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
<b>AC output (on-grid)</b>		
Rated output power	5000W	6000W
Rated output current	21.7A	26.1A
Rated grid voltage		L/N/PE, 230V
Rated grid frequency		50/60Hz
Max. output apparent power	5000VA	6000VA
Max. output current	21.7A	27.3A
THDi		<3%
Power factor		1 (adjustable/-0.8)
<b>Battery parameters</b>		
Battery type[3]		Lithium-ion, Lead-acid
Battery voltage range		42-58V
Number of battery input channels	1	1
Max. charge/discharge power	5000W	5000W
Max. charge/discharge current	100A	100A
BMS communication mode		CAN, RS485
<b>AC output (off-grid)</b>		
Rated output power	5000W	5000W
Rated output current	21.7A	26.1A
Rated output voltage		L/N/PE, 230V
Rated output frequency		50/60Hz
Max. output apparent power	5000VA	5000VA
Peak output apparent power, time	6000VA, 30s	6000VA, 30s
Max. output current	22.7A	22.7A
THDv(@ linear load)		<3%
Switching time		10ms default
<b>Efficiency</b>		
Max. MPPT efficiency		99.9%
Max. efficiency	97.8%	98%
European efficiency	97.3%	97.5%
Max. efficiency of charging/discharging [1]		94.6%
<b>Protection</b>		
DC switch		Yes
PV reverse connection protection		Yes
Battery 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 parameters</b>		
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), AS/NZS 4777	

[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.