



HYD 3k~6k-EP

3000/3680/4000/4600/5000/6000

Single-Phase

Energy storage integrated inverter

- Outdoor IP65 design
- Compatible with on grid and off grid
- A variety of work modes are optional
- EPS function, switching time is less than 10ms
- Built-in zero export function
- Flexible configuration of lead acid or lithium battery
- Integrated fanless self-recognition heat dissipation design



Datasheet	HYD 3000-EP	HYD 3680-EP	HYD 4000-EP	HYD 4600-EP	HYD 5000-EP	HYD 6000-EP
Battery Parameters						
Battery type	Lithium-ion, Lead-acid					
Nominal battery voltage	48V					
Battery voltage range	42-58V					
Battery capacity	50-2000Ah					
Maximum charging / Discharging power	5000W					
Maximum charging current	100A (Programmable)					
Maximum discharging current	100A (Programmable)					
Charging curve(Lithium-ion)	BMS					
Charging curve(Lead-acid)	3-Stage adaptive with maintenance					
Depth of discharge	Lithium-ion: 0-90% DOD adjustable, Lead-acid:0-50% DOD adjustable					
Input DC (PV side)						
Recommended Max. PV input power	4500Wp	5400Wp	6000Wp	6900Wp	7500Wp	9000Wp
Max DC power for single MPPT	3500W					
Max. input voltage	600V					
Start-up voltage	100V					
Rated input voltage	360V					
MPPT operating voltage range	90-580V					
Full power MPPT voltage range	160V-520V	180V-520V	200V-520V	230V-520V	250V-520V	300V-520V
Number of MPP trackers	2					
Max. input current per MPPT	13A/13A					
Max. input short circuit current per MPPT	18A/18A					
Output / Input AC (Grid side)						
Nominal AC power	3000W	3680W	4000W	4600W	5000W	6000W
Max. AC power output to utility grid	3300VA	3680VA	4400VA	5060VA	5500VA	6000VA
Max. AC power from utility grid	6000VA	7360VA	8000VA	9200VA	10000VA	12000VA
Max. AC current output to utility grid	14.3A	16A	19.1A	22A	23.9A	28.7A
Max. AC current from utility grid	26A	32A	34.8A	40A	43.5A	52.2A
Nominal grid voltage	L/N/PE, 220V, 230V, 240V					
Grid voltage range	180Vac-276Vac (According to local standard)					
Nominal frequency	50Hz / 60Hz					
Output THDi (@Nominal output)	< 3%					
Power factor	1 default (+/-0.8 adjustable)					
Output AC (Emergency Power Supply)						
Max. apparent power	3000VA	3680VA	4000VA	4600VA	5000VA	5000VA
Peak output power,Duration	3600VA, 60s	4400VA, 60s	4800VA, 60s	5520VA, 60s	6000VA, 60s	6000VA, 60s
Max. output current	13A	16A	17.4A	20A	21.7A	26.1A
Nominal voltage, Frequency	230V, 50/60Hz					
THDv (@Liner load)	< 3%					
Switch time	10ms default					
Efficiency						
MPPT efficiency	99.9%					
Max efficiency of solar inverter	97.6%	97.6%	97.6%	97.8%	97.8%	98.0%
European efficiency of solar inverter	97.2%	97.2%	97.2%	97.3%	97.3%	97.5%
Max. charging efficiency of battery	94.6%					
Max. discharging efficiency of battery	94.6%					
Protection						
PV reverse polarity protection	Yes					
PV insulation detection	Yes					
Ground fault monitoring	Yes					
Over current protection	Yes					
Over voltage protection	Yes					
DC switch	Yes					
Firm frequency response function	Optional					
SPD protection	MOV: Type III standard					
General Data						
Ambient temperature range	-30°C— +60°C (Above 45°C Derating)					
Standby self-consumption	< 10W					
Topology	High frequency insulation (for bat)					
Degree of protection	IP65					
Allowable relative humidity range	0—100%					
Communication	RS485, Wifi/Ethernet/GPRS, CAN2.0					
Protective class	Class I					
Max. operating altitude	4000m					
Current sensor connection	External					
Noise	<25dB					
Weight	22.5kg					
Cooling	Natural					
Dimension	486*503*183 mm					
Display	LCD & APP+ Bluetooth					
Warranty	5 Years or more					
Standard						
EMC	EN 61000-6-2, EN 61000-6-3, EN 61000-3-2, EN 61000-3-3, EN 61000-3-11, EN 61000-3-12					
Safety standards	IEC62109-1/2, IEC62040-1, IEC62116, IEC61727, IEC-61683, IEC60068(1,2,14,30)					
Grid standards	AS/NZS 4777, VDE V 0124-100, V 0126-1-1, VDE-AR-N 4105, CEI 0-21, EN50549, GB3/G59/G98/G99, UTE C15-712-1, UNE 206 007-1					