



HYD

3000~6000-EP

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

SINGLE-PHASE ENERGY STORAGE INTEGRATED INVERTER

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

Battery Parameters								
Battery type	LFP, Lead-acid							
Nominal battery voltage (V)	48							
Battery voltage range (V)	42-58							
Battery capacity (Ah)	50-2000							
Max. charging / discharging power (W)	3750	4000	4250			5000		
Max. charging current (A)	75	80	85			100		
Max. discharging current (A)	75	80	85			100		
Charging curve (Lithium-ion)	BMS							
Charging curve (Lead-acid)	3-Stage adaptive with maintenance							
Depth of discharge	LFP: 0-90% DOD adjustable, Lead-acid: 0-50% DOD adjustable							
Input DC (PV side)								
Recommended max. PV input power (Wp)	4500	5400	6000	6900		7500	9000	
Max. DC power for single MPPT (W)	3500					3750		
Max. input voltage (V)	600							
Start-up voltage (V)	100							
Rated input voltage (V)	360							
MPPT operating voltage range (V)	90-550							
Full power MPPT voltage range (V)	160-500	180-500	200-500	230-500		250-500	300-500	
Number of MPP trackers	2							
Max. input current per MPPT (A)	13 / 13							
Max. input short circuit current per MPPT (A)	18 / 18							
Output / Input AC (Grid side)								
Nominal AC power (W)	3000	3680	4000	4600		5000	6000	
Max. AC power output to utility grid (VA)	3300	3680	4400	4600		5000	6000	
Max. AC power from utility grid (VA)	6000	7360	8000	9200		10000	12000	
Max. AC current output to utility grid (A)	15	16	20	20.9		21.7	25	
Max. AC current from utility grid (A)	27.3	32	36.4	41.8		43.4	54.6	
Nominal grid voltage	L / N / PE, 230 Vac							
Grid voltage range	180 Vac-276 Vac (according to local standard)							
Nominal frequency	50 Hz / 60 Hz							
Output THDi (@Nominal output)	< 3%							
Power factor	1 default (+/-0.8 adjustable)							
Output AC (Emergency Power Supply)								
Max. apparent power (VA)	3000	3680	4000	4600		5000		
Peak output power, duration (VA, s)	3600, 60	4400, 60	4800, 60	5520, 60		6000, 60		
Max. output current (A)	13.6	16	18.2	20.9		22.7		
Nominal voltage, frequency	220 V / 230 V, 50 / 60 Hz							
THDv (@ Symmetrical load)	< 3%							
Switch time	10 ms default							
Efficiency								
MPPT efficiency	99.9%							
Max. efficiency of solar inverter	97.6%					97.8%		98.0%
European efficiency of solar inverter	97.2%					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							
Overcurrent protection	Yes							
Overvoltage 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 (W)	< 10							
Topology	High frequency insulation (for battery)							
Degree of protection	IP65							
Allowable relative humidity range	0~100%							
Communication	RS485/Bluetooth/CAN2.0/ Ethernet, Optional: WiFi							
Protective class	Class I							
Max. operating altitude	4000 m							
Current sensor connection	External							
Noise	< 25 dB							
Weight (kg)	21.5							
Cooling	Natural							
Dimension (mm)	482*503*183							
Display	LCD							
Certifications & Standards								
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	IEC 62109-1 / 2, IEC62040-1, IEC62116, IEC 61727, IEC 61683, IEC 60068 (1, 2, 14, 30)							
Grid standards	VDE V 0124-100, V 0126-1-1, VDE-AR-N 4105, CEI 0-21, EN 50549, G83 / G59 / G98 / G99, UTE C15-712-1, UNE 206007-1							

The models marked with **** should be available only for some designated countries.