



# SOFAR HYD SINGLE PHASE

6K-EP

6000

INV069

## FEATURES & BENEFITS

- 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

SOFAR HYD	6K-EP
Product Code	INV069
<b>BATTERY PARAMETERS</b>	
Battery type	Lithium-ion, Lead-acid
Rated battery voltage	48V
Battery voltage range	42-58V
Battery capacity	50-2000Ah
Maximum charging / discharging power	5000W
Maximum charging current	100A
Maximum discharging current	100A
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
<b>INPUT DC(PV SIDE)</b>	
Recommended Max. PV input power	9000Wp
Max. DC power for single MPPT	4500W
Max. input voltage	600V
Start-up voltage	100V
Rated input voltage	360V
MPPT operating voltage range	90~580V
Full power MPPT voltage range	300V~520V
Number of MPP trackers	2

## HYBRID INVERTERS

SOFAR HYD	6K-EP
Max. input current per MPPT	13A/13A
Max. input short circuit current per MPPT	18A/18A
<b>OUTPUT/INPUT AC(GRID SIDE)</b>	
Rated AC power	6000W
Max. AC power output to utility grid	6000VA
Max. AC power from utility grid	12000VA
Rated output current	26.1A
Max. AC current output to utility grid	27.3A
Max. AC current from utility grid	54.6A
Rated grid voltage	L/N/PE,230V
Grid voltage range	180Vac-276Vac (According to local standard)
Rated frequency	50Hz/60Hz
Output THDi (@Rated output)	<3%
Power factor	1 default (adjustable+/-0.8)
<b>OUTPUT AC(EMERGENCY POWER SUPPLY)</b>	
Max. apparent power	5000VA
Peak output power,Duration	6000VA, 60s
Max. output current	22.7A
Rated voltage,Frequency	230V, 50/60Hz
THDv (@Liner load)	<3%
Switch time	10ms default
<b>EFFICIENCY</b>	
MPPT efficiency	99,9%
Max efficiency of solar inverter	98,0%
European efficiency of solar inverter	97,5%
Max. charging efficiency of battery	94,6%
Max. discharging efficiency of battery	94,6%
<b>PROTECTION</b>	
PV reverse polarity protection	Yes
PV insulation detection	Yes
Ground fault monitoring	Yes
Over current protection	Yes
Over voltage protection	Yes
DC switch	Optional
Firm frequency response function	Optional
SPD protection	MOV:Type III standard
<b>GENERAL DATA</b>	
Ambient temperature range	-30°C~+60°C (Above 45°C Derating)
Standby self-consumption	<10W
Topology	High frequency insulation (for bat)
Max. parallel operation	10
Degree of protection	IP65
Allowable relative humidity range	0~100%
Communication	RS485, WiFi/Ethernet, CAN2.0
Protective class	Class I
Max. operating altitude	4000m
Current sensor connection	External
Noise	<25dB
Weight	21.5kg
Cooling	Natural
Dimension	482×503×183mm
Display	LCD & APP+Bluetooth
<b>STANDARD</b>	
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, IEC 62040-1, IEC 62116, IEC 61727, IEC 61683, IEC 60068(1,2,14,30)
Grid standards	VDE-AR-N 4105, VDE V 0126-1-1, AS/NZS 4777, CEI 0-21, G98/G99, TR321,TR322, EN 50438/EN50549, UTE C15-712-1, NRS 097-2-1, UNE 206 007-1
Warranty	5 years