HYD-10K-LS1

10 kW

Single-phase hybrid inverter



We've GOT YOU COVERED with CGL insurance.

High performance

- 2 MPPTs, Max. 40A DC input current per MPPT
- Support 200% overload for 10 seconds
- Max. 190A charge/discharge current

Flexible application

- Multiple inverters in parallel to build a microgrid
- Support diesel generator

Safe & reliable

- AFCI protection integrated
- On/off grid seamless switching (4ms)

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Model	HYD-10K-LS1
PV Input	
Recommended Max. PV Power	20 kWp
Max. Input Voltage	550 Vd.c.
Start-up Voltage [1]	90 Vd.c.
Rated Input Voltage	360 Vd.c.
MPP Voltage Range	60-500 Vd.c.
Number of MPPT	2
Max. Number of Input Strings per MPPT	2/2
Max. Input Current	40/40 A
Max. Isc	50/50 A
Battery	
Voltage Range	40-60 Vd.c.
Number of Battery Input Channels	1
Max. Charging Power	10 kW
Max. Discharging Power	10 kW
Max. Charging Current	210 A
Max. Discharging Current	210 A
Battery Type [2]	Lead-acid or Lithium-ion
BMS Communication	RS-485/CAN
AC Backup	
Rated Output Voltage	L+N+PE, 220/230/240 Va.c.
Rated Output Frequency	50/60 Hz
Rated Output Power	10 kW
Rated Output Current	45.5/43.5/41.7 A
Rated Apparent Power	10 kVA
Max. Apparent Power	11 kVA
Max. Output Current	50.0/47.8/45.8 A
Peak Output Apparent Power [3]	2 times of rated power, 10s
THDv(@ linear load)	<3%
Switching Time [4]	4 ms default
AC Generator	
Rated Input Voltage	L+N+PE, 220/230/240 Va.c.
Rated Input Frequency	50/60 Hz
Rated Input Power	10 kW
Rated Input Current	45.5/43.5/41.7 A
Rated Apparent Power	10 kVA
Max. Apparent Power	11 kVA
Max. Input Current	50.0/47.8/45.8 A
AC Grid	
Rated Voltage	L+N+PE, 220/230/240 Va.c.
Rated Frequency	50/60 Hz
Rated Output Power	10 kW
Rated Output Current	45.5/43.5/41.7 A
Rated Apparent Power	10 kVA
Max. Apparent Power	11 kVA
Max. Output Current	50.0/47.8/45.8 A
Max. Input Current [5]	50A
THDi	<3%
Power Factor Range	0.8 lagging - 0.8 leading
Efficiency	
Max. MPPT Efficiency	99.9%
Max. Efficiency	97.6%
European Efficiency	97.0%
Max. Efficiency of Charging/Discharging [6]	95.0%
Protection	
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 [7]	PV: Type II, AC: Type II
General Parameter	
Inverter Topology	Non-Isolation
Protective Class	Class I
IP Rating	IP66
Overvoltage Category	AC III, DC II
Operating Temperature Range	-30°C to +60°C (derating above +45°C)
Relative Humidity Range	5%-95%
Max. Operating Altitude	4000 m (derating above 2000 m)
Standby Self-consumption [8]	<15 W
Installation Method	Wall Mounted
Dimensions(W×H×D)	410×620×270 mm
Cooling Mode	Intelligent Airflow
Weight	30 kg
Communication	RS485, Optional: Wi-Fi/4G/LAN
Display	LCD & APP

[1] Minimum PV voltage to start MPPT operation. [2] Please refer to document "SOFAR inverter Model compatible battery list". [3] Full sun and battery.
[4] In the on-grid mode, the nominal power of the hybrid inverter is higher than the total power of the home loads. [5] Continuous AC passthrough current from grid to load.
[6] Battery-AC maximum efficiency of battery charge and discharge. [7] According to EN/IEC 61643-11. [8] Standby loss at rated input voltage.

*All specifications are subject to change without notice.