SOFAR HYD 5~10KTL-3PH-G4

5 / 6 / 8 / 10 kW

THREE-PHASE HYBRID INVERTER

Product advantages

- Up to 18A DC input current to compatible with the hight power PV module.
- Possesses AFCI functionality, providing a guarantee for the security of Residential roofs.
- Smart load control function supported
- Two times overload output (Off grid mode, Duration 60s)
- Supports three-phase unbalanced output and export limitation function for each phase
- Multiple parallel systems, more flexible system solutions

Model	HYD 5KTL-3PH-G4	HYD 6KTL-3PH-G4	HYD 8KTL-3PH-G4	HYD 10KTL-3PH-G4	HYD 10KTL-A-3PH-G4
DC input (PV)					
Recommended Max. PV input power	7500Wp	9000Wp	12000Wp	15000Wp	15000Wp
Max. input voltage	1100V				
Start-up voltage	200V				
Rated input voltage	620V				
MPPT operating voltage range	180~960V				
Number of MPP trackers	2				
Max. number of input strings per MPPT	1				
Max. input current per MPPT	18A				
Max. short-circuit current per MPPT	23A				
AC output (Grid)					
Rated output power	5000W	6000W	8000W	10000W	10000W
Rated output current	7.6A/7.2A/6.9A	9.1A/8.7A/8.3A	12.1A/11.6A/11.1A	15.2A/14.5A/13.9A	15.2A/14.5A/13.9A
Rated grid voltage	3(N)~+PE,380/400/415Vac				
Rated grid frequency	50/60Hz				
Max. output apparent power	5500VA	6600VA	8800VA	11000VA	10000VA
Max. output current	7.6A@415Vac 8.0A@400Vac 8.3A@380Vac	9.2A@415Vac 9.6A@400Vac 10A@380Vac	12.2A@415Vac 12.8A@400Vac 13.3A@380Vac	15.3A@415Vac 15.9A@400Vac 16.7A@380Vac	13.9A@415Vac 14.5A@400Vac 15.2A@380Vac
Max.Current from grid	13.9A@415Vac 14.5A@400Vac 15.2A@380Vac	16.7A@415Vac 17.4A@400Vac 18.2A@380Vac	22.2A@415Vac 23.2A@400Vac 24.2A@380Vac	27.8A@415Vac 29.0A@400Vac 30.3A@380Vac	27.8A@415Vac 29.0A@400Vac 30.3A@380Vac
THDi	<3%				
Power factor	0.8lagging ... 0.8leading				
Battery Parameters					
Battery type [1]	Lithium-ion & Lead-acid				
Battery voltage range	180~600V				
Number of battery input channels	1				
Max. charge/discharge power	5000W/5600W	6000W/6600W	8000W/8600W	10000W/10600W	10000W/10600W
Max. charge/discharge current	30A/30A				
BMS communication	CAN/RS485				
AC output (Backup)					
Rated output power	5000W	6000W	8000W	10000W	10000W
Rated output current	7.6A/7.2A/6.9A	9.1A/8.7A/8.3A	12.1A/11.6A/11.1A	15.2A/14.5A/13.9A	15.2A/14.5A/13.9A
Rated output voltage	3N~+PE,380/400/415Vac				
Rated output frequency	50/60Hz				
Max. output apparent power	5500VA	6600VA	8800VA	11000VA	11000VA
Peak output apparent power, time	10000VA, 60s	12000VA, 60s	16000VA, 60s	20000VA, 60s	20000VA, 60s
Max. output current	7.6A@415Vac 8.0A@400Vac 8.3A@380Vac	9.2A@415Vac 9.6A@400Vac 10A@380Vac	12.2A@415Vac 12.8A@400Vac 13.3A@380Vac	15.3A@415Vac 15.9A@400Vac 16.7A@380Vac	15.3A@415Vac 15.9A@400Vac 16.7A@380Vac
THDv(@ linear load)	<3%				
Switching time	20ms				
Efficiency					
Max. MPPT efficiency	99.9%				
Max. efficiency	97.6%	97.6%	97.8%	97.8%	97.8%
European efficiency	97.5%				
Max. efficiency of charging/discharging [2]	97.2%				
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	PV:Type Ⅱ, AC:Type Ⅱ				
AFCI	Yes				
General parameters					
Operating temperature range	-30℃~+60℃ (derating above +45℃)				
Relative humidity range	5%~95%				
Max. operating altitude	4000m (derating above 2000m)				
Standby self-consumption [3]	<20W				
Topology	Non-Isolation				
Installation method	Wall Mounted				
Degree of protection	IP66				
Dimensions (W*H*D)	530*460*205mm				
Cooling mode	Natural				
Weight	25kg				
Communication	CAN/RS485/WiFi,Optional:4G/LAN				
Display	LCD & APP				
Standard	IEC/EN 61000-6-1, IEC/EN 61000-6-3, IEC/EN 62109-1, IEC/EN 62109-2, EN 50549-1, VDE-AR-N 4105, VDE V 0124, CEI 0-21				

[1] Please refer to document "SOFAR inverter Model compatible battery list" [2] Battery-AC maximum efficiency of battery charge and discharge [3] Standby loss at rated input voltage
*All specifications are subject to change without notice.

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