









HYD 10K~20KTL-3PH

10000 / 15000 / 20000

Three-Phase Energy storage integrated inverter

-  2 MPPT input, more flexible configuration
-  APF mode, improved grid power quality
-  Diversified work patterns and rapid gains
-  Full digital control, higher control accuracy
-  Multiple parallel systems, more flexible system solutions
-  Off-grid output can be connected to unbalanced load, three-phase separate output is supported

Datasheet	HYD 10KTL-3PH	HYD 15KTL-3PH	HYD 20KTL-3PH
Battery Input Data			
Battery type		Li-Ion	
No. of battery input		2	
Battery voltage range		180V-800V	
Battery voltage range for full load	200V-800V	300V-800V	400V-800V
Max. charging/discharging power	10000W	15000W	20000W
Max. charging/discharging current		50A(25A/25A)	
Peak charging/discharging current, Duration		70A(35A/35A), 60s	
Charging strategy for battery		Self-adaption to BMS	
Battery capacity		25Ah~100Ah	
Communication interfaces		CAN(RS485)	
PV String Input Data			
Recommended Max. PV input power	15000Wp(7500Wp/7500Wp)	22500Wp(11250Wp/11250Wp)	30000Wp(15000Wp/15000Wp)
Max. DC voltage		1000V	
Start-up operating voltage		200V	
MPPT voltage range		180V-960V	
Nominal DC voltage		600V	
Full power MPPT voltage range	220V-850V	350V-850V	450V-850V
Max. input current		25A/25A	
Max. short current		30A/30A	
No. of MPP trackers		2	
No. of strings per MPP tracker		2	
AC Output Data (On-grid)			
Nominal AC power	10000W	15000W	20000W
Max. AC power output to utility grid	11000VA	16500VA	22000VA
Max. AC power from utility grid	20000VA	30000VA	40000VA
Max. AC current output to utility grid	16A	24A	32A
Max. AC current from utility grid	29A	44A	58A
Nominal grid voltage		3/N/PE, 220/380Vac, 230/400Vac	
Grid voltage range		184Vac~276Vac	
Nominal grid frequency		50/60Hz	
Grid frequency range		45Hz~55Hz/55Hz~65Hz	
Output power factor		~1(0.8 leading to 0.8 lagging)	
Output THDi (@Nominal output)		< 3%	
AC Output Data (Back-up)			
Nominal output power	10000W	15000W	20000W
Max. output power	11000VA	16500VA	22000VA
Peak output power, Duration	15000VA, 60s	22000VA, 60s	22000VA, 60s
Max. output current	16A	24A	32A
Peak output current, Duration	22A, 60s	32A, 60s	32A, 60s
Nominal output voltage		3/N/PE, 220/380Vac, 230/400Vac	
Nominal output frequency		50/60Hz	
Output THDv (@Liner load)		< 3%	
Switch time		<20ms	
Efficiency			
MPPT efficiency		99.9%	
Euro efficiency	97.0%	97.5%	97.8%
Max. efficiency	97.5%	97.8%	98.0%
Max. battery charge/discharge efficiency	97.2%	97.5%	97.7%
Protection			
DC switch		Yes	
PV reverse polarity protection		Yes	
Output over current protection		Yes	
Output over voltage protection		Yes	
Anti-islanding protection		Yes	
Residual current detection		Yes	
Insulation resistor detection		Yes	
Surge protection level		II	
Battery reverse protection		Yes	
General Data			
Dimension		565*508*244mm	
Weight		37kg	
Inverter topology		Transformerless	
Standby self-consumption		< 10W	
Operating temperature range		-30°C~+60°C	
Relative humidity		0~100%	
Noise		<45dB	
Operating altitude		<4000m	
Cooling		Forced airflow	
Protection degree		IP65	
Feature			
DC terminal		MC4	
Grid AC terminal		5P Connector	
Back-up AC terminal		5P Connector	
Display		LCD Display	
Monitoring interfaces		Bluetooth / RS485 / WIFI / GPRS (optional)	
Parallel operation		Yes	
Standard warranty		Standard 5 years	
Certifications & Standards			
EMC		EN61000-6-1, EN61000-6-3	
Safety		IEC62109-1, IEC62109-2, NB-T32004/IEC62040-1	
Grid		AS/NZS 4777, VDE V 0124-100, V0126-1-1, VDE-AR-N 4105, CEI 0-21, EN50549, G98/G99, UTE C15-712-1	