



HYD

5K~20KTL-3PH

5000/6000/8000/10000/15000/20000

Three-Phase

Energy storage integrated inverter

-  2 MPPT inputs, more flexible configuration
-  APF Maximum two battery inputs
-  Diversified work patterns and rapid gains
-  0123 4567 890 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	HYD	HYD	HYD	HYD	HYD	
	5KTL-3PH	6KTL-3PH	8KTL-3PH	10KTL-3PH	15KTL-3PH	20KTL-3PH	
	Battery Input Data						
	Battery type			Li-Ion			
	No. of battery input		1	1	1	2	2
	Battery voltage range			180V-800V			
	Battery voltage range for full load		200V-800V	240V-800V	320V-800V	200V-800V	300V-800V
Nominal charging/discharging power		5000W	6000W	8000W	10000W	15000W	
Max. charging/discharging current		25A	25A	25A	50A(25A/25A)	50A(25A/25A)	
Peak charging/discharging current, Duration		40A, 60s	40A, 60s	40A, 60s	70A(35A/35A), 60s	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		7500Wp(6000Wp/6000Wp)	9000Wp(6600Wp/6600Wp)	12000Wp(6600Wp/6600Wp)	15000Wp(7500Wp/7500Wp)	22500Wp(11250Wp/11250Wp)	
Max. DC voltage					1000V		
Start-up operating voltage					200V		
MPPT voltage range					180V-960V		
Nominal DC voltage					600V		
Full power MPPT voltage range		250V-850V	320V-850V	360V-850V	220V-850V	350V-850V	
Max. input current		12.5A/12.5A	12.5A/12.5A	12.5A/12.5A	25A/25A	25A/25A	
Max. short current		15A/15A	15A/15A	15A/15A	30A/30A	30A/30A	
No. of MPP trackers					2		
No. of strings per MPP tracker		1	1	1	2	2	
AC Output Data (On-grid)							
Nominal AC power		5000W	6000W	8000W	10000W	15000W	
Max. AC power output to utility grid		5500VA	6600VA	8800VA	11000VA	16500VA	
Max. AC power from utility grid		10000VA	12000VA	16000VA	20000VA	40000VA	
Max. AC current output to utility grid		8A	10A	13A	16A	24A	
Max. AC current from utility grid		15A	17A	24A	29A	44A	
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		5000W	6000W	8000W	10000W	15000W	
Max. output power		5500VA	6600VA	8800VA	11000VA	16500VA	
Peak output power, Duration		10000VA, 60s	12000VA, 60s	16000VA, 60s	20000VA, 60s	22000VA, 60s	
Max. output current		8A	10A	13A	16A	24A	
Peak output current, Duration		15A, 60s	18A, 60s	24A, 60s	30A, 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		97.5%	97.5%	97.5%	97.7%	97.7%	
Max. efficiency		98.0%	98.0%	98.0%	98.2%	98.2%	
Max. battery charge/discharge efficiency		97.6%	97.6%	97.6%	97.8%	97.8%	
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					571.4*515*264.1mm		
Weight		33kg	33kg	33kg	37kg	37kg	
Inverter topology					Transformerless		
Standby self-consumption					<15W		
Operating temperature range					-30°C~+60°C		
Relative humidity					0~100%		
Noise					<45dB		
Operating altitude					<4000m		
Cooling		Natural	Natural	Natural	Forced airflow	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					EN50462, IEC61851-1, IEC61851-2, IEC61851-3, IEC62109-2, EN50438, EN50463, IEC62109-2, EN50464, EN60529, IEC61010-1		
Grid					EN50464, EN50465, IEC61851-1, IEC61851-2, IEC61851-3, IEC62109-2, EN50438, EN50463, IEC62109-2, EN50464, EN60529, IEC61010-1		
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