

ME 5K~20KTL-3PH

5 / 6 / 8 / 10 / 15 / 20 kW

SOFAR

AC-COUPLED ENERGY STORAGE INVERTER



Product advantages

- Max. battery charge / discharge efficiency up to 97.8%
- Off-grid and on-grid output can be connected to unbalanced load
- Wide battery voltage range (180-800 V)
- Flexible switching between grid- tied mode and energy storage mode
- Up to 2 battery inputs with max 50 A charge / discharge current
- Compact design with functional LCD



Datasheet	ME 5KTL-3PH	ME 6KTL-3PH	ME 8KTL-3PH	ME 10KTL-3PH	ME 15KTL-3PH	ME 20KTL-3PH
Battery Input Data						
Battery type	Lithium-ion, Lead-acid					
No. of battery input	1			2		
Battery voltage range	180-800V					
Battery voltage range for full load	200-800V	240-800V	320-800V	200-800V	300-800V	400-800V
Rated charging / discharging power	5000W	6000W	8000W	10000W(5000/5000)	15000W(7500/7500)	20000W(10000/10000)
Max. charging / discharging current	25A			50A (25 / 25)		
Peak charging / discharging current, duration	40A, 60s			70A (35 / 35), 60s		
Charging strategy for battery	Self-adaption to BMS					
Communication interfaces	CAN (RS485)					
AC Output Data (On-grid)						
Nominal AC power	5000W	6000W	8000W	10000W	15000W	20000W
Max. AC power output to utility grid	5500VA	6600VA	8800VA	11000VA	16500VA	22000VA
Max. AC power from utility grid	10000VA	12000VA	16000VA	20000VA	30000VA	40000VA
Rated output current	7.2A	8.7A	11.6A	14.5A	21.7A	29A
Max. AC current output to utility grid	8A	10A	13A	16A	24A	32A
Max. AC current from utility grid	15A	17A	24A	29A	44A	58A
Nominal grid voltage	3 / N / PE, 230 / 400 Vac					
Grid voltage range	184 Vac-276 Vac					
Nominal grid frequency	50 / 60 Hz					
Grid frequency range	45 Hz-55 Hz / 55 Hz-65 Hz					
Output power factor	1 default (+/-0.8 adjustable)					
THDi	< 3%					
AC Output Data (EPS)						
Nominal output power	5000W	6000W	8000W	10000W	15000W	20000W
Max. output power	5500VA	6600VA	8800VA	11000VA	16500VA	22000VA
Peak output power, duration	10000VA, 60s	12000VA, 60s	16000VA, 60s	20000VA, 60s	22000VA, 60s	
Rated output current	7.2A	8.7A	11.6A	14.5A	21.7A	29A
Max. output current	8A	10A	13A	16A	24A	32A
Peak output current, duration	15A, 60s	18A, 60s	24A, 60s	30A, 60s	32A, 60s	
Nominal output voltage	3 / N / PE, 230 / 400 Vac					
Nominal output frequency	50 / 60 Hz					
Output THDv (@Symmetrical load)	< 3%					
Switch time	< 10 ms					
Efficiency						
Max. discharge efficiency	97.6%			97.8%		
Max. charge efficiency	97.6%			97.8%		
Protection						
Output overcurrent protection	Yes					
Output overvoltage protection	Yes					
Anti-islanding protection	Yes					
Residual current detection	Yes					
Surge protection level	PV: Type II, AC: Type III					
Battery reverse protection	Yes					
Features						
DC terminal	MC4					
Grid AC terminal	5P Connector					
Back-up AC terminal	5P Connector					
Display	LCD					
Monitoring interfaces	Bluetooth / RS485 / WiFi					
Parallel operation	Yes					
General Data						
Dimension (W*H*D)	586.6*515*261.2mm					
Weight	30kg			34kg		
Inverter topology	Transformerless					
Standby self consumption	< 15W					
Operating temperature range	-30°C ~ +60°C					
Relative humidity	0-100%					
Operating altitude	< 4000 m					
Cooling	Natural			Forced airflow		
Protection degree	IP65					
Standard						
EMC	EN61000-3-2, EN61000-3-3, EN61000-3-11, EN61000-3-12, EN61000-6-2, EN61000-6-3					
Safety standards	IEC62109-1, IEC62109-2, IEC62040-1					
Grid standards	VDE V 0124-100, V0126-1-1, VDE-AR-N 4105, CEI 0-21 / CEI 0-16, EN50438 / EN 50549, G83 / G59 / G98 / G99, UTE C15-712-1, UNE206 007-1					

* All specifications are subject to change without notice.