



**ME**

# 3000SP

3000 W

## AC-COUPLED ENERGY STORAGE INVERTER

- Various operational modes available
- Flexible configuration, allowing both lead-acid and lithium batteries
- LCD+LED – user friendly interface
- IP65 design for outdoor
- Smart fanless cooling design
- Smart battery energy management system
- Compatible with other brands of inverter

## Datasheet

## ME 3000SP

Battery Parameters	
Battery type	Lithium-ion, Lead-acid
Nominal battery voltage (V)	48
Battery voltage range (V)	42-58
Recommended battery capacity (Ah)	200 (100-500 optional)
Recommended storage capacity (kWh)	9.6
Max. charging current (A)	60
Charging current range (A)	0-60 (programmable)
Charging curve	3-Stage adaptive with maintenance
Max. discharging current (A)	60
Electronic protection	OCP OTP OVP
Short circuit protection	Fuse (100 A)
Discharge times (hour)	Po=1 kVA 9.6 H, Po=3 kVA 3.2h
Depth of discharge	Lithium-ion: 0-85% DOD adjustable, Lead-acid: 0-90% DOD adjustable
AC Parameters	
Max. output power (VA)	3000
Max. output current (A)	13
AC voltage range (V)	180-270
Grid frequency range	44-55 Hz / 55-65 Hz
THD	< 3%
Power factor	1 default (+/-0.8 adjustable)
Connection phase	Single
Current (inrush) (A)	0.8 / 1us
Max. output fault current (A)	100 / 1us
Max. output over current protection (A)	13
System Parameters	
Max. charging efficiency	>95%
Max. discharging efficiency	>95%
Standby losses (W)	< 5
Topology	High frequency isolated transformer
Degree of protection	IP65
Safety protection	Anti-islanding, RCMU, ground fault monitoring
Communication	RS485 ,WiFi / Ethernet,CAN2.0
SPD protection	III
Environmental	
Ambient temperature range	-25°C~+60°C (above 45°C derating)
Allowable relative humidity range	0~100%
Protective class	Class I
Max. operating altitude	2000 m
Current sensor connection	External
Emergency Power Supply	
EPS rated power (VA)	3000
EPS rated voltage (V), frequency	230, 50 / 60 Hz
EPS rated current (A)	13
Total harmonic distortion	< 3%
Switch time	< 3s
General Data	
Noise	< 25 dB
Weight (kg)	16
Cooling	Natural
Dimension (mm)	358*543.2*171.7
Display	LCD
Standard	
EMC	EN 61000-6-1, EN 61000-6-2, EN 61000-6-3, EN 61000-6-4
Safety standards	IEC 62109-1 / 2, IEC62040-1
Grid standards	AS / NZS 62040, VDE V 0124-100, V 0126-1-1, VDE-AR-N 4105, CEI 0-21, EN 50549, G83 / G98, UTE C15-712-1

**ME**

## 5K~20KTL-3PH

5K / 6K / 8K / 10K / 15K / 20K W

### AC-COUPLED ENERGY STORAGE INVERTER

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

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