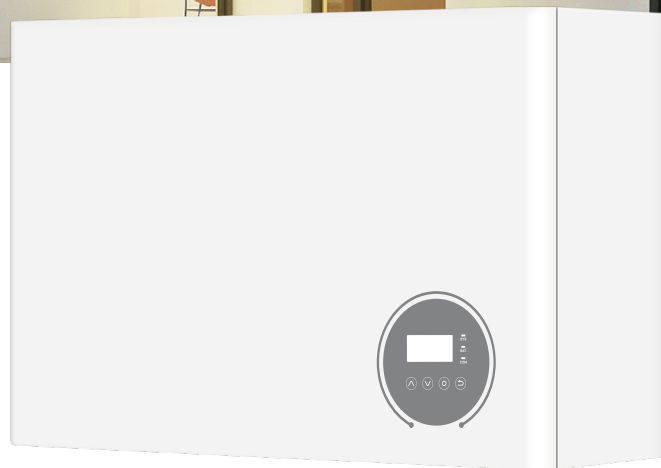


Single Phase HYBRID INVERTER

PRODUCT MODEL

- MÄC-INH3.6K (Hybrid Inverter)
- MÄC-INH5K (Hybrid Inverter)
- MÄC-SPB5K (Battery Inverter)



HIGH PERFORMANCE

- 200% PV over management;
- 200% backup overload capacity, 60A battery current;
- Max. efficiency 97.3%, Battery efficiency 97%;
- Load monitoring accuracy 10W, Battery discharging threshold 10W.



HIGH RELIABILITY

- UPS level redundant protection against backup load breakdown;
- Three-level firmware and two-level hardware battery protection;
- Multiple temperature monitoring, delicate thermal management;
- Max. 6 Inverters in parallel to increase power availability.



HIGH INTELLIGENCE

- Internal EMS optimizes home energy supply automatically;
- PV production forecast;
- Built-in electric power service, FCAS, VPP, etc;
- Online monitoring, online diagnosis, online service.

PARAMETERS

INVERTER MODEL		MÄC-INH3.6K	MÄC-SPB5K	MÄC-INH5K
BATTERY PORT				
Battery Type		Li-on / Lead-acid		
Nominal Battery Voltage		96V		
Battery Voltage Range		80~400V		
Max. Charging Current		45A	60A	60A
Max. Discharging Current		45A	60A	60A
PV INPUT				
Max. PV Input Power		7.36kW	10kW	
Max. PV Input Voltage		580V	580V	
MPPT Range		100~550V	100~550V	
Startup Voltage		100V	100V	
Max. Input Current		15A / 15A	15A / 15A	
Max. Short Circuit Current		18.75A / 18.75A	18.75A / 18.75A	
MPPT Trackers		2	2	
Strings Per MPPT Tracker		1 / 1	1/1	
GRID PORT				
Rated Output Power		3.68kVA	5kVA / 4.6kVA(DE)	5kVA / 4.6kVA(DE)
Max. Output Current		16A	21.7A	21.7A
Max. Output Apparent Power		3.68kVA	5kVA / 4.6kVA(DE)	5kVA / 4.6kVA(DE)
Max. Input Power		7.36kVA	10kVA	10kVA
Rated Grid Voltage		230Vac		
Grid Voltage Range		180~270Vac		
Rated Grid Frequency		50/60Hz		
Power Factor		-0.8~+0.8		
THDi		<3%		
BACKUP PORT				
Surge Backup Power		7.36kVA	10kVA	10kVA
Rated Backup Power		3.68kVA	5kVA	5kVA
Rated Backup Voltage		230Vac		
Rated Backup Frequency		50/60Hz		
THDv		<3% (Linear Load) / <5% (Non-linear Load)		
DCV		<100mV		
Crest Ratio		3 : 1		
Transfer Time		<10ms		
EFFICIENCY				
Max. Efficiency		97.3%	97.3%	
Europe Efficiency		96.2%	96.2%	
MPPT Efficiency		99.9%	99.9%	
Max. Round Trip Efficiency		90%	90%	90%
GENERAL DATA				
Operating Temperature Range		-20°C~60°C		
Relative Humidity		0~95% (No Condensing)		
Operating Altitude		≤3000m (>3000m Derating)		
Cooling		Natural Convection		
Noise		<30dB		
Topology		Transformerless		
Dimensions (W*H*D)		590x405x205mm		
Protection Degree		IP65		
Weight		19.5kg	18kg	19.5kg
Warranty		5 Years / 10 Years		
HMI&COMM.				
Communication with BMS		CAN / RS-485		
Load Monitoring		Meter / CT / Backup box		
External Communication		RS-485 / WIFI / 4G / Ethernet		
User Interface		LED / LCD		
CERTIFICATE				
Grid Regulation		VDE-AR-N 4105:2018, G98, G99, C10/11:2021, NTS 631, RD647:2020		
		UNE 217002:2020, CEI 0-21, VDE 0126-1-1, NRS 097-2-1, AS/NZS 4777.2:2020, EN 50549-1		
Safety Regulation		IEC/EN 62109-1&2, IEC/EN 62477-1:2012		
EMC		IEC/EN 61000-6-1, IEC/EN 61000-6-2, IEC/EN 61000-6-3, IEC/EN 61000-6-4		

Note: Specifications are subject to change without advance notice.

