



Our Environment, Our Energy, Our Future



5kW Hybrid Inverter (M5KES)

DATASHEET

Technical Data

DC Input	
Max. recommended DC Power [W]	7000kW
Max. DC Voltage [V]	550V
Nominal DC operating voltage [V]	360V
MPPT voltage range [V]	125V-500V
MPPT voltage range @ full load [V]	220V-500V
Max. Input Current [A]	14A/14A
Max. Short Circuit Current [A]	17.5A/17.5A
Start Input Voltage [V]	125V
No/ of MPP Trackers	2
Strings per MPP Tracker	1
Max. Inverter Back Feed Current to Array	0
DC disconnect switches	/
AC output	
Nominal AC power [VA]	5000VA
Max. apparent AC power [VA]	5000VA
Rated grid voltage range [V]	230V(176V-270V)
Rated grid frequency [Hz]	50Hz/60Hz
Nominal AC current [A]	21.7A
Max. AC current [A]	21.7A
Displacement power factor	0.99 leading...0.99 lagging
Total harmonic distortion [THD]	<2%
Load control	Optional
AC Input	
Nominal AC power [VA]	5000VA
Rated grid voltage range [V]	230V(176V-270V)
Rated grid frequency [Hz]	50Hz/60HZ
Nominal AC current [A]	21.7A
Max. AC current [A]	21.7A
Displacement power factor	0.99 leading...0.99 lagging
AC inrush current [A]	35A
EPS output	
EPS rated power [VA]	5000VA
Max. EPS power [VA]	5000VA
EPS rated voltage, Frequency	230VAC, 50/60Hz
EPS rated current [A]	21.7A
Max. EPS current [A]	21.7A
Switch time [s]	<500ms
Total Harmonic distortion [THD]	<2%
Parallel option	Yes
Compatible with generator	Yes (signal provided)
Battery Parameter	
Battery type	Lithium battery/Lead-ACID
Battery voltage range[V]	40V-58V
Recommended battery voltage [V]	48V
Cut off voltage [V]	40V
Max. charging voltage [V]	58V
Max. protective voltage [V]	59V
Max. charge/discharge current [A]	95A/104.2A
Peak charge/discharge current [A]	95A/104.2A
Communication interfaces	CAN/RS485/Wifi/LAN/DRM
Reverse connect protection	Yes
Efficiency	
MPPT efficiency	99.9%
Euro efficiency	97%
Max. efficiency	97.6%
Max. battery charge efficiency	95%
Max. battery discharge efficiency	95%

Basic data

M5KES	
Dimension [W/H/D(mm)]	500*520*200
Dimension of packing [W/H/D(mm)]	665*635*330
Net weight [kg]	25
Gross weight [kg]	31
Installation	Modularization
Operating temperature [°C]	-25-+60 (derating at 45)
Storage temperature [°C]	-25 - +60
Storage /Operation relative humidity	4% - 100% (condensing)
Altitude [m]	<2000
Ingress protection	IP65 (for outdoor use)
Protective class	I

Safety and protection

Safety and protection	
Over/under voltage protection	Yes
DC isolation protection	Yes
Monitoring ground fault protection	Yes
Grid protection	Yes
DC injection monitoring	Yes
Back feed current monitoring	Yes
Residual current detection	Yes
Anti-islanding protection	Yes
Over load protection	Yes
Over heat protection	Yes
Max. output fault current	55A
Max. output over current	28.7A