



**Our Environment, Our Energy, Our Future**



**8kW Hybrid Inverter (M8KDS)**

**DATASHEET**

## Technical parameters

PV input data	
Max. DC input power [kW}	12kW
No. of MPPT's	4
MPPT range [V]	120VDC-500VDC
Max. DC input voltage [V]	500VDC
Max. input current [A]	12A
Battery input data	
Nominal voltage (VDC)	48V
Max. charging/discharging current [A]	190A/190A
Battery voltage range [V]	40V-60V
Battery type	Lithium and lead acid battery
Charging strategy for Li-on battery	Self-adaption to BMS
AC output data (on-grid)	
Nominal output power [VA]	8KVA
Max. apparent power [VA]	8.8KVA
Output voltage range [V]	220V-240V split phase, 1Φ, 230 1 phase
Output frequency	50Hz-60Hz (45Hz to 54.9Hz/55Hz to 65Hz)
Nominal AC current output [A]	34.8A
Max. AC current output [A]	38.3A
Max. AC current from grid [A]	50A
Output power factor	0.8 leading ....0.8 lagging
Output total harmonic distortion [THD]	<2%
AC output data (Back-Up)	
Nominal apparent power [VA]	8KVA
Max. apparent output power [VA]	8.8KVA
Nominal output voltage L-N [V]	240V
Nominal output frequency [Hz]	60Hz
Output THDU	<2%
Efficiency	
Europe efficiency	>=97.8%
Max. battery to load efficiency	>=97.2%
Protection	
Grounding detection	Yes
Arc fault protection	Yes
Island protection	Yes
Battery reverse polarity	Yes
Insulation resistor detection	Yes
Residual current monitoring unit	Yes
Output over current protection	Yes
Back-up output short protection	Yes
Terminal temperature detection	Yes
Output over voltage protection	Yes
Output under voltage protection	Yes

General data	
Output conduit	25.4mm
PV input conduit	25.4mm
Battery input conduit	34.5mm
Operating temperature range	-25°C ~ +60°C
Relative humidity	0-95%
Operating altitude	0-4000m
Ingress protection	IP65/NEMA 3R
Weight	32kg
Size (width*height*depth)	430mm x 710mm x 220mm
Cooling	Natural convection
Noise emission	<38dB
Display	LCD
Communication with BMS/meter/EMS	RS485, CAN
Supported communication interface	RS485, WLAN, 4G(optional)
Self-consumption at night	< 2.5W (with battery enabling < 5W)
Safety	UL1741SA all options, UL1699B, CSA 22.2
EMC	FCC part 15 class
Grid connection standards	IEEE 1547, IEEE 2030.5, Hawaii rule 14H, rule 21 phase I,II,III