



Encore 5K

Input (PV)	
Max. Power [kW]	7
Max. DC Voltage [V]	550
MPPT Voltage Range [V]	125-500
Max. Input Current of Single MPPT [A]	14/14
MPPT Tracker/Strings	2/1
AC Output	
Rated Output Power [kVA]	5
Max. Output Current [A]	21.7
Grid Voltage/Range [V]	230/176-270
Frequency [Hz]	50/60
Displacement Power Factor	0.99lagging-0.99leading
THDi [%]	<2
Battery	
Battery Voltage Range [V]	40-58
Max. Charging Voltage [V]	58
Max. Charge/Discharge Current [A]	95/104.2
Battery Type	Lithium/Lead-acid
Communication Interface	CAN/RS485/WiFi/LAN/DRM
EPS Output	
Rated Power [kVA]	5
Rated Output Voltage [V]	230
Rated Output Current [A]	21.7
Rated Frequency [Hz]	50/60
Automatic Switching Time [ms]	<20
THDv [%]	<2
General Data	
Battery Charge/Discharge Efficiency [%]	95.0
DC Max. Efficiency [%]	97.6
Europe Efficiency [%]	97.0
MPPT Efficiency [%]	99.9
Ingress Protection	IP65
Noise Level [dB]	<35
Operating Temperature [°C]	-25°C to +60°C (derating at 45°C)
Cooling	Natural
Storage/Operation Relative Humidity	0-95% (non-condensing)
Altitude [m]	<2 000

Notes to Specification Sheet

1. AC/DC Protection: The inverter includes both AC and DC protection however, the installer must still adhere to SANS regulations.
2. Surge Protection: DC Type II / AC Type II.
3. Over Voltage Category: DC Type III / AC Type III.
4. Integrated Protection: PV Input Lightning Protection, Anti-Islanding Protection, PV String Input Reverse Polarity Protection, Insulation Resistor Detection, Residual Current protection, Output Overcurrent Protection, Output Short Circuit Protection.
5. Wifi Gateway: The inverters are equipped with a WIFI gateway that uses the Solarman monitoring platform. (WIFI only, no Ethernet).

DISTRIBUTORS AND RESELLERS

Contact your nearest Accredited Freedom Won Distributor or Accredited EPCs for further sales and technical support.

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Dimensions - H x W x D [mm]	515x550x200
Crated Dimensions - H x W x D [mm]	680x660x330
Weight [kg]	32
Night-time Consumption [W]	15-25
Safety Compliance	
Safety Standard	IEC/EN 62109-1/-2, IEC/EN 62477-1
EMC	IEC/EN 61000-6-1, IEC/EN 61000-6-3
Certificates	South Africa NRS097-2-1:2017, UK G98, G99, EN 50549-1

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