



## **Encore 12K**

Input	(PV)
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Max. Power [kW]	18
Max. DC Voltage [V]	1000
Max. Input Voltage [V]	700
MPPT Voltage Range [V]	180~850
Max. Input Current of Single MPPT [A]	13/13
MPPT Tracker/Strings	2
Max. Number/Max. Input Strings Number	1/1
AC Output	
Rated Output Power [kVA]	12
Max. Output Current [A]	19.1
Grid Voltage/Range [V]	230/176~270
Frequency [Hz]	50/60
THDi[%]	<3
Battery	
Battery Voltage Range [V]	125~600
Battery Working Voltage Range [V]	150~550
Max. Charge/Discharge Current [A]	50
Battery Type	Lithium/Lead-acid
Communication Interface	LCD;APP / RS485, CAN / WIFI / GPRS / 4G
EPS Output	
Rated Power [kVA]	12
Nominal Output Voltage [V]	400, 3W+N+PE
Rated Output Current [A]	19.1
Rated Frequency [Hz]	50/60
THDv[%]	<2
General Data	
Battery Charge/Discharge Efficiency [%]	97.6
DC Max. Efficiency [%]	98.2
Europe Efficiency [%]	97.5
MPPT Efficiency [%]	99.9
Ingress Protection	IP65
Noise Level [dB]	<25
Operating Temperature [°C]	-25 to +60°C
Cooling	Natural
Storage/Operation Relative Humidity	0~100% (non-condensing)
Altitude [m]	4 000 (derating above 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.





## **Encore 12K**

Dimensions - H x W x D [mm]	566x596x220
Crated Dimensions - H x W x D [mm]	660x720x330
Weight [kg]	32
Night-time consumption [W]	<3
Safety Compliance	
Safety Standard	IEC/EN 62109-1:2010, IEC/EN 62109-2:201
EMC	IEC/EN 61000-6-1:2019, IEC/EN 61000-6-2:2019, IEC/EN 61000-6-3:2021, IEN/EN 61000-6-4:2019, IEC/EN 61000-3-2:2019/A1:2021, EN 61000-3-3:2013/A2:2021, IEC/EN 61000-3-11:2019, EN 61000-3-12:2011
Certificates	South Africa NRS, IEC 62109-1/-2, IEC 61000-6-1, IEC 61000-6-3

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