

ENCORE THREE PHASE INVERTER RANGE

Range Overview Specification Sheet

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Encore 12K



Encore 15K

Input (PV)

Max. Power [kW]	18	22.5
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	15
Max. Output Current [A]	19.1	23.8
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	15
Nominal Output Voltage [V]	400, 3W+N+PE	
Rated Output Current [A]	19.1	23.8
Rated Frequency [Hz]	50/60	
THDv [%]	<2	

DISTRIBUTORS AND RESELLERS

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

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General Data		
Battery Charge/Discharge Efficiency [%]	97.6	97.8
DC Max. Efficiency [%]	98.2	97.6
Europe Efficiency [%]	97.5	97.8
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)	
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	

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).

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