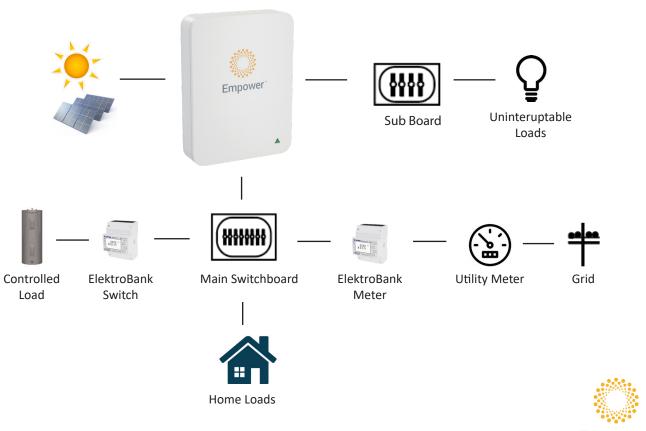
ElektroBank 14

The 14 kWh Hybrid Inverter, Load Control and Lithium Battery Device



Typical Configuration



Empower[™] ElektroBank 14 Technical Data Sheet

PV Input	
Vmax PV	430V
Max Continuous Current / Isc PV	15A / 15A
PV MPPT Starting Voltage	150V (then works down to 100V for hysteresis)
PV Maximum Power	2 x 4 kW MPPT
PV MPPT Operating Range	100V – 430V
Inverter Efficiency (PV to grid)	96%

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Battery	
Voltage (nominal)	154V
Maximum Continuous Current Input / Output	32A
Maximum Continuous Power	5 kW
Battery Type	Lithium Ion Phosphate (LiFePO4)
Battery Total Energy	15.4 kWh
Battery Usable Capacity	13.9 kWh at 90% Depth of Discharge
Battery Round Trip Efficiency from Grid	approx. 91%
Battery Lifetime Warranty	70% total capacity remaining after 10 years or 45 MWh throughput (whichever comes first)

AC Input / Output Ratings (Grid Port)

Grid Nominal Frequency	50Hz
Voltage (nominal)	230V single phase
Maximum Continuous Current Input/Output	41.7Arms / 21.7Arms
Inrush Current	50Arms for 100ms
Real Power Continuous Input / Output	9.6 kW / 5kW
Apparent Power Continuous Input / Output	9.6 kVA / 5kVA
Power Factor	+/-0.8 adjustable
Maximum Input/Output Overcurrent Protection	40A
Maximum Output Fault Current	30A

System	
Residual Current Monitoring	Integral for grid port (backup port requires external RCD)
Inverter Topology	Non-isolated
Supporting Demand Response Modes	DRMO
Certification Marks	AS4777.2.2020, IEC62109-1, IEC62109-2, AS62040.1, AS61000.6.3:2012, IEC62619
Communications	WiFi, LAN (RJ-45), 3G/4G

Mechanical & Environmental		
Maximum Dimensions (H / W / D)	1200 mm / 900 mm / 225 mm	
Ambient Operating Temperature Range*	-20°C to +50°C	
Ingress Protection (IP) Rating	IP 66	
Weight	180 kg	
Environmental Category	Outdoor	
Wet Location Classification	Wet	
Maximum Altitude	2000m	
Storage Conditions	-10°C to 30°C, max 95% RH non-condensing. SOC = 30%	

AC Output Ratings (Backup Port)	
Frequency	50Hz
Voltage (nominal)	20V single phase
Maximum Continuous Current	20A
Inrush Current	90A max
Active/Apparent Power Continuous	3.5 kW / 3.5kVA
Active / Apparent Power Overload	4.6 kW / 4.6kVA for 1 hour
Power Factor	+/-0.6

* battery will automatically de-rate power according to internal temperatures. Maximum ambient temperature for continuous 5kW charging/discharging (unrealistic use case) with no PV is ~40°C. Minimum temperature with no de-rating is 4°C

Designed in Australia, Manufactured in Malaysia

