ElektroBank 14

Our all-in-one solar-battery with solar PV inverter product, the ElektroBank 14, comes with all the bells and whistles of Tier-1 products at a lower cost per kWh than Tier-2 products.

Compact All-in-one Design

Elegent design avoids multiple boxes on your wall, and saves on installation and enclosure costs.

Integrated Solar PV Inverter

Saves on cost of 8 kW solar PV inverter, avoids wasted solar due to clipping, and generation during negative prices.

Integrated EV Charging Control

Automatically optimizes EV charging and supports 3rd party chargers, most don't and it can drain your battery.

Integrated Water Heating Control

Automatically optimizes resistive water heating, which is essential if you are on a wholesale electricity plan.

Long Duration Emergency Backup

One of the largest battery capacities at 14 kWh provides one of the longest backups in the industry.

Local Warranty Support

10 year or 45 MWh warranty is one of the best in Australia, and locally supported out of our NSW headquarters.

Designed for Australian Conditions

-20C to 45C operating ranges means you can depend on it during cold snaps and heat waves.

Software so Intelligent it's Patented

Patented AI automatically manages your battery, solar PV, EV charger and water heater to maximise value.

Wholesale and Virtual Power Plant (VPP) Plan Ready

Enjoy industry leading payback periods by going on to a wholesale passthrough energy plan or VPP.

Integrated Customer App

Easily monitor your savings and manage your preferences across your solar PV, battery, water

Questions? Reach out to our friendly sales team

02 8745 8821
sales@empowerenergy.com.au

www.empowerenergy.com.au

PV Input	
Vmax PV	430V
Max Continuous Current / Isc PV	15A / 19 A
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%

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
Active/Apparent Power Continuous	9.6 kW / 5 kW
Apparent Power Continuous	9.6 kVA / 5 kVA
Power Factor	+/-0.6 adjustable
Maximum Input/Output Overcurrent Protection	40A
Maximum Output Fault Current	30A

Designed in Australia, Manufactured in Malaysia

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
Battery Storage Conditions	0°C – 25°C (max 95% RH non-condensing) for a maximum of 6 months from their production date. -20°C and 50°C (max 95% RH non-condensing) for a maximum of 3 months from their production date
Enclosure Storage Conditions	-20°C and 50°C, max 95% RH non-condensing

AC Output Ratings (Backup Port)	
Frequency	50Hz
Voltage (nominal)	230V single phase
Maximum Continuous Current	20Arms
Inrush Current	90A max
Active / Apparent Power Continuous	3.5 kW / 3.5 kVA
Active / Apparent Power Overload	4.6 kW / 4.6 kVA 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