



POWER BANK 20KWH (B20K)

The PB20K is a 20KWh energy storage system that safely stores power from solar panels (PV) or AC mains for reuse when needed.

Applications

- Solar power backup
- Residential, Commercial and Peak Shaving
- Mini-grid systems

Our PB20K Energy Storage System is built robust using galvanized steel panels to protect against corrosion. The four castor wheels can be removed to install directly to a flat surface.

Battery Technology

The PB20K incorporates four banks of sixteen Lithium Iron Phosphate (LiFePO₄) batteries, providing efficient storage, high energy output and long life.

Battery Management System (BMS)

Our PB20K integrates BMS controllers to efficiently manage the charging/discharging and health of the internal batteries. They can be connected to an external Inverter for monitoring purposes and data read out. WIFI

Parallel / series Connections

The PB20K battery does not support series connections however, up to four units can be connected in parallel providing up to 80KWh of stored energy.

Warranty

EVb360 warranties our B20K for 10 years. The internal LiFePO₄ batteries can be cycled (charged/discharged) 10000 times and providing a lifetime of 15 years under normal use, when cycled daily.

APPLIANCE	HOURLY CONSUMPTION (KWH)	HOURS OF USE	DAYS OF USE
Fridge	0.13	153	6
Oven	2.3	8	0.3
Freezer	0.07	285	11
TV	0.18	111	4
Laptop	0.05	400	16

ELECTRICAL SPECIFICATIONS

Nominal Voltage (V) :	51.2
Nominal Capacity (Ah) :	400
Operational Voltage Range (VDC) :	42-58.4
Internal resistance (mΩ)	≤32 @ 50% SOC
Peak Current (A)	450A @2s
Efficiency	>95%
Self Discharge	<3% Per Month
Short Circuit Protection (μs)	200-600
Battery capacity (kWh)	20.48

CHARGING SPECIFICATIONS

Maximum Charge Current (A)	200
Charge Target Voltage (V)	56 ~ 58.1
Maximum Charge Voltage (V)	58.4
High Voltage Cutoff (V)	58.8

DISCHARGING SPECIFICATIONS

Maximum Discharge current (A)	200
Discharge Target Voltage (V)	43~45
Minimum Discharge Voltage	42
Low Voltage Cutoff (V)	40

MECHANICAL SPECIFICATIONS

Dimensions: (width x depth x height)	900 x 400 x 1200 (mm)
Weight (Kg)	252
Case Material:	Galvanized steel
Cell Type Chemistry	LiFePO ₄

WORKING ENVIRONNENT

Charge Recommended Temperature (°C)	0 ~ 45
Discharge Recommended Temperature(°C)	-10 ~ 35
Working Temperature (°C)	0 ~ 45
Storage Temperature (°C)	-10 ~ 55
Self-heating Temperature Rating	15-20°C / Hour

Note 1. CAUTION, do not exceed maximum charging voltage.

