Backup Battery Power Stations: Top 3 Brands

When the power goes out, a backup battery power station keeps your fridge cold, your phone charged, and a fan running. It is a big rechargeable battery in a box — no gas, no fumes, no pull cord. You charge it from a wall outlet (or solar panels), and it quietly powers your things.

The two numbers that matter

- **Capacity (Wh)** — how long it lasts. Think of it as the size of the tank. A 1,000Wh battery runs a 50-watt fan for about 20 hours.
- **Output (W)** — how much it can power at once. A fridge needs a few hundred watts; a space heater needs 1,500. If your devices add up to more than the output number, it will not run them.
- **Simple math:** divide the Wh number by your device's watts for a rough idea of hours. A 2,000Wh battery ÷ a 100-watt load = about 20 hours.

1. Jackery

The best-known name. Jackery's current models use long-life LiFePO4 batteries. Prices change often — the figures below are recent street prices, so check before you buy.

- **Explorer 1000 v2** — the medium one (about $429). 1,070Wh, 1,500W output, about 24 pounds. Runs phones, a fan, a lamp, and a TV.
- **Explorer 2000 v2** — the large one (about $699). 2,042Wh, 2,200W output, about 40 pounds. Powers a fridge plus more at the same time — a longer-outage box.
- **HomePower 3000** — the biggest (about $1,599). About 3,000Wh, 3,600W output, about 60 pounds. Runs heavy loads like a microwave.

2. EcoFlow

Known for very fast recharging — some models refill from a wall outlet in about an hour. Check current prices before you buy; they change often.

- **RIVER 3 Plus** — the small one. 286Wh, 600W output, about 10 pounds. Good for phones, a laptop, a small fan, or a lamp during a short outage. Easy to carry.
- **DELTA 3** — the medium one. 1,024Wh, 1,800W output, about 28 pounds. Runs a fridge, Wi-Fi, phones, and a laptop together; recharges from empty in under an hour on a wall outlet.
- **DELTA 3 Max** — the large one. 2,048Wh, 2,400W output. A step up for longer outages.

3. Bluetti

Known for long battery life — many models are rated for thousands of recharge cycles. Recent sale prices are below; prices change often.

- **Elite 100 V2** — the medium one (often about $449 on sale). 1,024Wh, 1,800W output, about 25 pounds. A solid middle choice for a fridge, phones, and lights.
- **AC180** — the medium one (often about $449 on sale). 1,152Wh, 1,800W output, about 35 pounds. Similar to the Elite 100 V2 with a little more capacity.
- **Elite 200 V2** — the large one (often about $899 on sale). 2,073Wh, 2,600W output, about 53 pounds. Runs bigger loads and lasts longer — a serious outage box.

How to pick the right size

- **Short outages (a few hours):** a small unit (under 500Wh) keeps phones, a fan, and a lamp going.
- **A full day:** a medium unit (around 1,000Wh) keeps a fridge cold, charges everything, and can run a CPAP machine all night (about 40–60 watts without the heated humidifier).

- **Multiple days:** a large unit (2,000Wh or more) — or a medium unit plus solar panels to refill it each day.
- **Watch the heavy hitters.** A space heater (1,500W) will drain a 1,000Wh battery in under an hour. Heaters and hair dryers are the fastest way to empty any battery — use them sparingly or not at all.

Solar panels, in plain words

- Panels refill the battery from sunlight. They work best in direct sun and take several hours — slow but free.
- **Match the panel to the unit.** Each battery lists a maximum solar input (for example, 500W). Bigger panels refill faster, up to that limit.
- **A possible tax credit.** Buying the battery bundled with solar panels may qualify for a federal solar tax credit (reported at 30% through 2032). Ask your tax preparer — the battery alone usually does not qualify.

Stay safe

These are safe to use indoors — no gas, no fumes, no carbon monoxide. But do not plug in more than the output rating, keep the vents clear so the unit can cool itself, and keep it dry. Never try to power your whole house through a wall outlet — that takes special wiring by an electrician.

> **Not sure what size you need?** Call Sean — he'll help you match a power station to your fridge, CPAP, or outage plan.

Questions? Call Sean: (813) 770-6082