What can I keep running, and for how long?

Approximate hours from one fully charged battery, running one device at a time.

Real runtimes vary with the device, its settings, the temperature and the battery's age and own power use; low-watt devices can run noticeably less than shown. A battery runs a device only if its output rating (watts) covers it. To run several devices at once, add their watts. **If someone depends on medical equipment, follow the provider's and the manufacturer's guidance for backup power.** This table is not medical advice.

		Battery size, approximate			
Device	**Watts used**	**500 Wh**	**1,000 Wh**	**2,000 Wh**	**4,000 Wh**
HOUSEHOLD					
LED bulb, Wi-Fi router or phone charger (each)	10 W	**43 h**	**85 h**	**170 h**	**340 h**
Laptop	65 W	**6.5 h**	**13 h**	**26 h**	**52 h**
Fan	75 W	**5.7 h**	**11 h**	**23 h**	**45 h**
TV	105 W	**4.0 h**	**8.1 h**	**16 h**	**32 h**
Refrigerator [1]	75 W avg.	**5.7 h**	**11 h**	**23 h**	**45 h**
Freezer [1]	37.5 W avg.	**11 h**	**23 h**	**45 h**	**91 h**
Sump pump, ⅓ HP [2]	800 W	**30 min**	**1.1 h**	**2.1 h**	**4.3 h**
Window air conditioner [2]	820 W	**30 min**	**1.0 h**	**2.1 h**	**4.1 h**
Space heater	1,500 W	**15 min**	**35 min**	**1.1 h**	**2.3 h**
Microwave	1,650 W	**15 min**	**30 min**	**1.0 h**	**2.1 h**
MEDICAL DEVICES					
CPAP, no heated humidifier	40 W	**11 h**	**21 h**	**43 h**	**85 h**
CPAP with heated humidifier	120 W	**3.5 h**	**7.1 h**	**14 h**	**28 h**
Nebulizer (compressor)	80–140 W [3]	**3.0 h**	**6.1 h**	**12 h**	**24 h**
Power wheelchair charger (24 V)	180–280 W [3]	**1.5 h**	**3.0 h**	**6.1 h**	**12 h**
Oxygen concentrator (home, 5 L/min)	310–350 W [3]	**1.2 h**	**2.4 h**	**4.9 h**	**9.7 h**

Method: hours = battery watt-hours × 85% ÷ device watts. Fully charged battery, one device at a time, no recharging; the battery's own standby use is not counted.

[1] Average watts over a day, including on/off cycling; running watts are higher (330 W and 200 W).
[2] Hours of active running. Motors also need extra starting watts.
[3] Range from manufacturer specifications; runtimes use the higher figure. Check the label or manual of the actual device.

Size it for your own devices: betterpowered.com/shop/battery-backup-calculator/