

Portable Power Station Sizing Worksheet

List the equipment you truly need, then calculate energy before shopping. Marketing departments hate this one simple trick.

Step 1 - Essential loads

■ Device: _____ Watts: ____ Hours: ____	■ Device: _____ Watts: ____ Hours: ____
■ Device: _____ Watts: ____ Hours: ____	■ Device: _____ Watts: ____ Hours: ____
■ Device: _____ Watts: ____ Hours: ____	■ Largest starting surge: _____ W

Step 2 - Energy estimate

■ Multiply watts x hours for each device	■ Add device watt-hours: _____ Wh
■ Add 15-25% for conversion losses	■ Target usable capacity: _____ Wh
■ Required continuous output: _____ W	■ Required surge output: _____ W

Step 3 - Real-world fit

■ Recharge from wall outlet	■ Recharge from vehicle
■ Compatible solar input	■ Cold-weather operating limits checked
■ Weight is manageable	■ Enough outlets and correct port types

Final check

■ Manual confirms device compatibility	■ No indoor fuel generator use
■ Cables are correctly rated	■ Battery will be stored charged
■ Warranty/service available in Canada	■ Price includes needed panels and cables

Runtime estimate: usable watt-hours divided by average watts. Actual runtime varies with temperature, surge loads, inverter losses, battery age and manufacturer limits.