

## Portable solar panels and solar trailers



In the past, few portable solar chargers included internal battery storage. Fold-up solar chargers included a flexible PV module and adapters for connection to any small electronic device. The majority of these fold-out solar chargers have a 5- to 25-watt rating, although higher-wattage models are available that can power a laptop computer or portable communication equipment during camping trips into remote areas.

With recent advances in battery technology, many fold-out and pocket-size solar chargers now include a built-in battery. Although fairly small and lightweight, these lithium iron phosphate (LiFePO<sub>4</sub>) batteries can store an amazing amount of power. Once full, the built-in battery can recharge your electronic devices regardless of solar access.

### [GOAL ZERO NOMAD 7](#)

Solar capacity 7W (8-9V)

Power Output: USB 1A (5W max)

Weight: ( 460g)

Cell type: Monocrystalline

Ideal for: Guide 10, Switch 8, Smartphone, GPS, Headlamp

Chainable: Yes

In the box: 1 x Nomad 7 Solar Panel, 1 x 12V Adapter

There are few solar trailer manufacturers, but the features and performance of these systems have increased significantly. The smaller single-axle units typically include PV arrays in the 1 to 2 kW range, and can be towed behind an SUV. However, the larger dual-axle units have much larger PV arrays with heavier battery banks, and require a mid-sized truck to tow.

These systems can be expensive, and are typically sold or leased to government agencies for disaster response. PV trailers are also sometimes used in broadcast and entertainment situations when a noisy generator would be a problem.

In addition to large fold-out solar arrays, they often include a backup generator. The generator is used to recharge the battery bank or cover large power demands. The more sun-hours available, the fewer hours the generator is required to run to recharge the batteries.

Greentow

GT916 Trailer

Solar power rating: 1,620 W

Battery capacity: 12,384 Wh (258 Ah)

Inverter power rating: 6,000 W

Price: \$49,900

Weight: 3,300 lbs.

Size: 9 × 5.8 × 6 ft.

Warranty: 20 yrs. (modules)

Charge connection: AC and DC outlets

Compatibility: Larger electronics/tools/appliances (limited)