SUNJACK 20W PORTABLE SOLAR CHARGER



The <u>SUNJACK 20W PORTABLE SOLAR CHARGER</u> comes with two 8,000mAh batteries, giving you enough power to charge eight iPhones after 5 hours of sun. If you have your own portable battery, you can also use it with the SunJack, but our battery is optimized for maximum charging speed from the SunJack.

Our secret sauce is in our proprietary USB port and our lithium-polymer battery. We've found a way to optimize filling up the battery from sunlight - think of it as being able to get more water out of your faucet faster. The SunJack is able to get more electrons flowing into the battery faster than any solar charger available, which means you get wall-outlet charging speeds in an incredibly portable form-factor.

The battery can also charge from any standard micro-USB plug. This is useful if you're going on a trip and want to have maximum charge with no down-time. The battery will reach a full charge in about 5 hours.

If you look at a standard Apple wall charger, you'll see that the small plug is 5 Watts, and the large plug is 12 Watts. The SunJack is more powerful than both of these! You want maximum solar power because the rating for a solar panel is only for direct sunlight. This means if it's cloudy, a 5 Watt solar panel isn't going to provide enough charge, but our 20 Watt solar panel will still have plenty of juice to spare (allowing for charging even under indirect sunlight or cloudy conditions).

A Watt is a unit of power, which indicates how much energy can be transferred in a given second. Most solar chargers on the market (with our form-factor and portability) are less than 14 Watts. Most 20 Watt solar panels are not portable - they're large, heavy, and rigid. And this is the peak power under direct sunlight, which means a 5 Watt solar charger in indirect sunlight may only produce 3 Watts of power - less than a small Apple plug. When it comes to solar, more Watts = more power!

You can also think of Watts similar to horsepower or CPU speed. You can still get the work done on lower horsepower/CPU speed/less Watts, it will just take longer. With 14 and 20 Watts of solar power, there's ample power to charge your devices, even with clouds.

If you're wanting wall-outlet charging speeds of up to 2 Amps of current, you'll want as much power as possible. Fortunately with the SunJack, even if there's no sun you'll be able to rapidly charge all your devices with our battery.

Our solar USB ports provide a full 2 amps of output - which means the 20 Watt SunJack could charge 2 iPads at the same time under direct sunlight!

Our battery also is able to take in a full 2 amp charge from the solar cells, and discharge a full 2 amps - which allows for very rapid energy storage unlike anything else available. Simply put, our USB ports allow for maximum fast-charging of any device.

The efficiency ratio of the solar cell to convert sun light to DC current is ~19%, which is higher than average due to using mono-crystalline instead of poly-crystalline solar cells. Here's a more in-depth article on the difference between mono and poly solar cells.

Beyond technical performance, we also care about the longevity of this product. The great thing about our monocrystalline solar cells is that they've shown to produce 80% of their power even after 25 years of use. The lithium-polymer battery should hold 80% of it's capacity after 1,000 cycles - so if you were to cycle the battery every day it should still charge even after three years.

FEATURES

- **V** Unit Dimension: 10.5" x 1.5" x 1.5" (26.7cm x 3.8cm x 3.8cm)
- ✓ Unit Weight: 8oz / 227 g
- ✓ Packaging Dimension: 10.5" x 2.25" x 1.75" (26.7cm x 5.7cm x 4.5cm)