

Solar Charging Commercial and Military Grade Laptop Computers

Global Solar's goal is to provide a lightweight, portable solar charger able to replenish the energy used by a laptop computer. However, attempting to charge a laptop computer battery directly from a solar panel is not recommended by Global Solar Energy for the following reasons:

- Most laptops require a specific input voltage ranging from 11 – 22 volts depending on the adapter in use. Electrical output from a solar panel is variable and not controlled. Global Solar's larger foldable modules are unregulated and produce voltages ranging from 11 – 35 volts.
- Most laptops require 65 - 120 watts of power to charge when connected to a power source such as the electrical outlet (wall) or battery. Global Solar's largest foldable module is rated at 62 watts.

To provide reliable mobile power, Global Solar recommends using a solar compatible battery pack and adapter with our foldable solar modules. The benefits to this solution include:

- The battery pack can store the sun's energy at whatever level the solar module is producing. Stored solar energy can be used at night or other times when using a solar panel is not possible.
- The battery pack can deliver the exact steady stream of regulated power the laptop computer requires.
- Some battery packs have multiple adapters for connecting and charging the laptop computer and selectable output voltages to support your laptop make/model.

Commercial Laptop Charging Configuration :

- Global Solar foldable modules (12 to 62 watt panels recommended)
- Tekkeon MP3450 and MP3700
 - Compatible with car charger receptacle (CLA socket)
 - Sunbooster cable (sold separately) supports the smaller modules such as the Sunling 12 and 25 watt.
 - Multiple laptop adapters included
- Global Solar offers 2.1 mm barrel plug adapters for connecting a solar panel to the Tekkeon battery pack.

To purchase this commercial laptop configuration, please visit our partners at GoSolarlife or Backup-Power.ca.

Military Laptop Charging :

Global Solar recommends using, see diagram below, a solar compatible battery pack and charge controller such as the Bren-tronics BB2590/U between our foldable solar modules and the laptop computer.



Proposed Configuration:

- Global Solar P3 30 or 62 watt foldable solar module
- Bren-tronics BB2590/U, Solar Charge Controller, & Pass-Thru Adapter
- Lind Global Solar Charger/Adapter – supporting the following makes/models of laptop computers; Panasonic Toughbook, Dell Latitude, Dell Inspiron, Dell Precision, Dell Vostro, General Dynamics Itronix, Sony VGN, and Sony Vaio.

To purchase this military laptop configuration, please visit our partners at Maxavision.

