



SOLAR POWERBANK 20000mAh

EN – USER MANUAL

Package Contents: Portable power bank with solar panel, Two built-in side cables, 30 cm Type-C to Type-C cable, User manual

Technical Specifications: Capacity: 20,000 mAh, Model: HY-2103B, Material: ABS, Dimensions: 166 × 84 × 31 mm, Weight: 510 g, Flashlight: Brightness: 200 lumens, Cables: 11.5 cm USB-A to Type-C, 11.5 cm USB-A to Lightning, 30 cm Type-C to Type-C

Input (charging the power bank): Micro USB: 5V–2A (10W) or 9V–2A (18W) or 12V–1.5A (18W), Type-C: 5V–3A (15W) or 9V–2A (18W) or 12V–1.5A (18W), Solar charging: 5V–0.25A (1.25W)

Output (charging devices): Type-C: 5V–3A (15W) or 9V–2.22A (20W) or 12V–1.67A (20W), USB-A1: 5V–3A (15W) or 9V–2A (18W) or 12V–1.5A (18W) USB-A2: 5V–4.5A (22.5W) or 9V–2A (18W) or 12V–1.5A (18W), Wireless charging: 5W / 7.5W / 10W / 15W

Power Bank On/Off: Press the power button once to turn on the power bank. The power bank turns off automatically after a period of inactivity.

Charging the Power Bank via Cable (Input):

Use the included Type-C to Type-C cable. Connect one end of the cable to the power bank's Type-C input. Connect the other end to a wall adapter with a USB-C port. For fast charging, the adapter must support PD (Power Delivery) and have a power output of at least 20W. Alternatively, you can charge via the micro USB input. While charging, the indicator LEDs light up one by one. All 4 LEDs will be lit when fully charged.

Charging Devices (Output):

Connect your device to the power bank using one of the provided cables via USB-A or USB-C ports (see Output section). You can also charge your phone wirelessly using the power bank. After turning on the power bank, place your phone on the marked wireless charging area (indicated by the lightning icon). Proper charging is indicated by a green flashing LED. Charging starts automatically when a device is connected. Once charging is complete, disconnect the device. For the fastest charging, use the USB-C port with the included C-to-C cable or the USB-A port that supports up to 22.5W (compatible with Huawei and Honor fast-charging technology).

Charging the Power Bank via Solar Energy:

The solar panel is intended for emergency/auxiliary charging only. We recommend using it for charging in emergencies and placing it in direct sunlight for 1–2 hours. The power bank can charge from 0% to 50%, after which the charging speed drops significantly. For charging above 50%, use a wall charger. A glowing green LED near the solar panel indicates the power bank is being charged by sunlight. The power bank can also hold some charge under artificial light. Please note that the internal batteries can overheat. Place the power bank outdoors or on a windowsill, and monitor it regularly while charging. Avoid exposing the power bank to high temperatures (e.g. on a car dashboard in direct sunlight), as this can lead to overheating and battery damage.

Using the Flashlight Feature:

Press and hold the flashlight button for 5 seconds to turn it on.

The flashlight has 3 modes (steady, SOS, strobe), which can be toggled with a single click. To turn off the flashlight, press and hold the button again for 5 seconds.

Important Information– Charging Capacity

Charging with a power bank involves energy loss. For example, a 20,000mAh power bank will not fully charge a 2,500mAh phone eight times. In practice, only about 60–65% of the stored energy is usable by your device. This is due

to voltage conversion (e.g., from 3.7V to 5V), heat, internal resistance, and battery efficiency. Example: A 20,000mAh (3.7V) power bank stores approximately 74Wh of energy. After losses, the usable energy is about 45Wh. A phone with a 6,000mAh battery at 3.85V (≈ 22.8 Wh) can be charged approximately 2–3 times.

How to Maximize Power Bank Efficiency

Charge devices before batteries are fully drained. Avoid direct sunlight and high temperatures (ideal is 0°C to 30°C). Use high-quality cables for best performance. Before long-term storage, charge to ~50%. Store in a dry, dark place. For faster charging, turn off power-heavy features like Wi-Fi, video, or gaming.

Safety Instructions

- Avoid excessive impacts, high mechanical pressure, deformation of the casing, and exposure to direct sunlight.
- Avoid contact with aggressive chemicals, fire, moisture, rain, or snow.
- Do not disassemble, expose to temperatures above 40 °C, or throw into fire — risk of fire, explosion, or chemical burns. Do not insert objects into the ports. Do not use if damaged.
- There are no user-serviceable parts inside. Do not attempt repairs yourself. If the power bank becomes swollen or deformed, stop using it immediately.
- Keep out of reach of children.
- To avoid electric shock, disconnect from power before cleaning or any similar maintenance.