

V75 Battery Pack

Instructions

The V75 USB Battery Pack supplies continuous power to the Orcas Flowmeter. To charge your device, simply plug into either of USB outputs. These battery packs can recharge via any USB port or from a solar panel. Battery packs can be charged while charging your device.

> The interior of a solar charger case can become hot in the sun. In hot conditions, open the battery compartment to increase air flow and avoid overheating.



- 1 Power Level Button
- 2 Power Level Indicator
- 3 MicroUSB Input
- 4 USB C Input
- 5 USB Output 1
- 6 USB Output 2
- 7 MicroUSB Charging Cable

Charging Your Orcas Flowmeter

Using your Orcas Flowmeter's USB charging cable, plug directly into either of the two (2) **USB Outputs**. Device will automatically begin to charge and supply power.

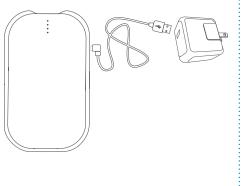
Battery features Always-On technology and will not shut off. To stop charging your Orcas flowmeter, double tap the **Power Level Button** or disconnect from the battery. To resume charging, tap the **Power Level Button** once.

Remove cable(s) from USB Outputs when storing the battery for an extended period.

Charge Battery Pack from USB or USB-C

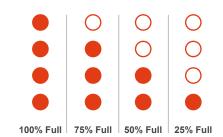
Recharge the battery from any USB port (with the included MicroUSB

Charging Cable). Can also be recharged via USB-C using any USB Type C cable (not included).



Battery Level Indicator

Press **Power Level Button** to show charge level. LEDs will blink when charging and indicate charge progress.



Charge Time (Hours)

POWER SOURCE	HOURS
USB (5V)	8
5W Solar Panel	18
10W Solar Panel	9

Tips for Faster Solar Charging

- Place solar panel outside in direct sunlight. Panel will not work inside. Charge time increases on cloudy days.
- 2. Point panel directly at the sun, avoid shading the panel.
- 3. Confirm LEDs on battery are lighting up in sequence.

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Specifications

USB Battery Pack

The USB Battery Pack features 19,200mAh and is designed to continuously power microcontrollers.

- Optimized to Charge from Solar
- Pass Through Charging
- USB Port
- Standard Always-On Feature

Size and Weight

- 6" x 3.1" x 1" (15.1 x 7.8 x 2.6 cm)
- 13.5 oz (382 grams)

USB Battery

- Capacity: 19,200mAh, 71 Watt Hours
- Output: 5V/2A , 3A max (2 outputs)
- MicroUSB Input: 5-6V/2A
- Minimum Charge Current: 5mA (indicators turn on at 60mA)
- Maximum Power Point (MPP): 5.2V
- USB-C (Input Only): 5V/2A
- Battery Type: Li-Ion
- Protection: Short circuit over charge, over discharge, over temperature (45° Input Cutoff, 60° Output Cutoff), under temperature (0° Input Cutoff, -15° Output Cutoff)
- Safe for air travel (Carry-on Luggage Only)

Includes

- USB Battery Pack
- USB to USB-C Charging Cable

Testing and Certifications

- UN 38.3
- EC 62133
- CE
- FCC

Always-On Mode

Battery features updated Always On technology as its standard state and will not shut off even if your device is drawing low or no power. There is no low current cutoff.

To stop charging your device, double tap the Power Level Button or disconnect from the battery. To resume charging, tap the Power Level Button once.

Battery recovers into Always On mode after discharge, over-temperature and under-temperature events. Power consumption in Always On mode is approximately 7mA (26mW).



Discharge and charge fully every 5 months to preserve battery life. Store between 20 - 35 C (-4 to 95 F). Charge between 0 and 45 C (32 to 113 F). Do not expose battery to high heat or direct flame. Dispose of properly. Do not throw in trash or incinerate. Do not get battery wet, store in high humidity or otherwise short circuit. Do not disassemble or tamper with battery.





