UPAS Outdoor Enclosure Weatherproof / Solar-ready / Portable / Easy setup

Revision 1.0 Aug 24, 2022



SPECIFICATIONS	
Exterior size	220 mm × 108 mm × 81 mm (without mounting bracket)
Weight	770 g (without UPAS, external battery, or solar panel)
Power options	Line, battery, or solar
External battery options	Voltaic Systems V25 (23 Wh), V50 (47 Wh), or V75 (71 Wh); sold separately
Solar panel options	Voltaic Systems P105 (5 W) or P110 (10 W); sold separately



Tired of building your own weatherproof enclosures to use your Ultrasonic Personal Air Samplers (UPAS) outdoors? Now you don't have to! The official UPAS Outdoor Enclosure is now available from Access Sensor Technologies.

The UPAS Outdoor Enclosure can house both the UPAS v2, which we've been selling since 2017, and the new UPAS v2+, which we launched in 2021.

What's included

When you purchase a UPAS Outdoor Enclosure, you will, at a minimum, receive the enclosure and a mounting bracket. The enclosure includes a weatherproof external power port as well as the hardware you need to secure your UPAS and an external battery pack inside. The mounting bracket is equipped with the hardware you need to mount a solar panel or sun shade.

Let us know how you wish to power your UPAS (e.g., wall power adapter, external battery pack, solar panel) to receive the appropriate cables along with your enclosure. Please also let us know if you want your enclosure configured with a cooling fan.

Access Sensor Technologies does not sell external battery packs or solar panels. The customer may purchase those items separately. The UPAS Outdoor Enclosure is compatible with V25, V50, and V75 batteries as well as P105 and P110 solar panels from Voltaic Systems.



Powering the UPAS for outdoor sampling

Do you have line power available at your outdoor sampling site? If so, the outdoor enclosure features a weatherproof port that allows the UPAS to be plugged into a standard 110 V electrical outlet via a 5 V DC power adapter. In this configuration, the UPAS still technically runs off the internal battery, but the internal battery will charge as-needed to keep the UPAS running continuously.

No line power? No problem! The UPAS battery life can be extended by connecting an always-on external battery pack to the micro-USB port. The outdoor enclosure is designed to accommodate either the Voltaic Systems V25 (23 Wh), V50 (47 Wh), or V75 (71 Wh) batteries (sold separately).

Got sun? The outdoor enclosure mounting bracket is designed to accommodate either the Voltaic Systems P105 (5 W) or P110 (10 W) solar panel (sold separately). Plug one of these panels into the external battery pack, via the weatherproof charging port on the side of the outdoor enclosure, to run your UPAS on solar power.



Outdoor Enclosure with: A, B) Voltaic Systems P110 10-Watt solar panel. C) P105 5-Watt solar panel.







Exploded view of Outdoor Enclosure showing UPAS v2+, cooling fan, and Voltaic Systems V75 battery

Sampling in hot weather

The UPAS can always be powered by its standard 24 Wh internal battery pack. If you plan to sample in an environment where temperatures will regularly exceed 35 °C, ask us about replacing the standard internal battery pack in your UPAS with a 25 Wh wide temperature-range pack. The standard internal battery pack can charge and discharge at temperatures ranging from 0 to 45 °C and -20 to 60 °C, respectively. The wide temperature-range pack can charge and discharge at temperatures ranging from 0 to 60 °C and -40 to 60 °C, respectively.

The UPAS will circulate air through the outdoor enclosure at a flow rate of 1 or 2 L min⁻¹, depending on the sample flow rate. If you need additional convective cooling, we can install a secondary exhaust fan inside the enclosure. This fan will run off the same power source as the UPAS (line or battery).



UPAS Outdoor Enclosure lid internal with cooling fan

Access Sensor Technologies www.accsensors.com 970-818-7520 @AccessSensor 320 East Vine Drive, Suite 221, Fort Collins, CO 80524