



Foldable Solar Panels: Power Beyond Borders

The Danish company's technology is providing rugged power solutions for austere environments

UnatSolar's P3 portable solar panels are a product line of solar-energized power generators for mobile power needs. Incorporating solid state, thin-film, PowerFLEX™ solar technology, the P3 provides an excellent choice for situations that require lightweight, durable, silent power. P3 portable solar panels allow users to re-charge batteries, power communication equipment and mobile electronics, plus they reduce the battery logistic challenge. It also provides silent, energy independence to the user.

UnatSolar sell to several NATO countries and NATO themselves, who are using the company's solar panels to reduce the weight borne by soldiers on patrol by decreasing the number of primary and secondary cell batteries a patrol carries. The company argues that the efficiency of UnatSolar's solar panels are significantly higher than competitors.

The recent temporary shortages of diesel fuel in Afghanistan due to events in Pakistan, have reinforced the need to look for alternative power sources to diesel generators that help to ensure energy availability and cost reduction. Panels cannot be used as an alternative to diesel generators but for personnel on the move solar panels have great utility.

Using P3 portable solar panels, a BA2590 battery being recharged using a 62 watt panel would require three to four hours although this is weather dependent. In the case of an unattended sensor or communications relay, instead of using a new battery every 24 hours, a solar panel or panels can be substituted, charging the battery during the day.

The UnatSolar 62 watt Portable Power Pack solar module offers a unique solution for reliable and portable solar power for charging battery packs, satellite phones, PC, lighting, low-ampage 12 or 24 volt appliances. The

P3-62 weighs less than 1.5 Kg and when folded it is compact, lightweight and easily stored and transported. The P3 product line is designed for low maintenance and rugged durability. Built-in grommets also allow for hanging, mounting or laying in any position. A charge control device would typically be used with this product. The Cell's Temperature Operating Range is - 40C to 80C and weighs 1.3Kg.

The UnatSolar 30 watt Portable Power Pack solar module offers a unique solution for reliable and portable solar power for satellite phones, GPS, battery charging, and laptops. The P3-30 weighs less than 1.2 Kg and when folds it is compact, lightweight and easily stored and transported.

The UnatSolar P3 124 Watt, 12 or 24 Volt Portable Power Pack solar module is the newest military product. Compared to the 62 watt panels, the 124 watt is simply bigger and doubly powerful. It is offered in Desert Tan,

Green camouflage or black. With double the power, the recharging time for recharging that battery is much faster and time often has limited availability for soldiers and if offered a faster recharging process, then they will use that solution.

Various accessory cables are available to enable connection from the solar panels to many different types of electronic devices. The solar charge controllers and battery packs help regulate power input from the solar panels into electronic devices creating a more efficient charge.

The Five Piece Accessory Kit is included with every solar pack. Each cable has a standard SAE Trailer plug on one end that plugs directly into the solar panel. The accessory kit includes; one 12V CLA receptacle, one 12V CLA plug, one 4 inch 2.5mmID barrel plug, one set of battery clamps and one 8 foot extension cable.

A Nato Stock Number is available. ■



Solar power provides a ready energy source even in the most isolated of locations © DoD