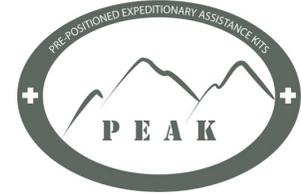




The mission of WorldWater & Solar Technologies is to make clean water and power available everywhere in the world through its proprietary solar technology.

PEAK™ Pre-Positioned Expeditionary Assistance Kits

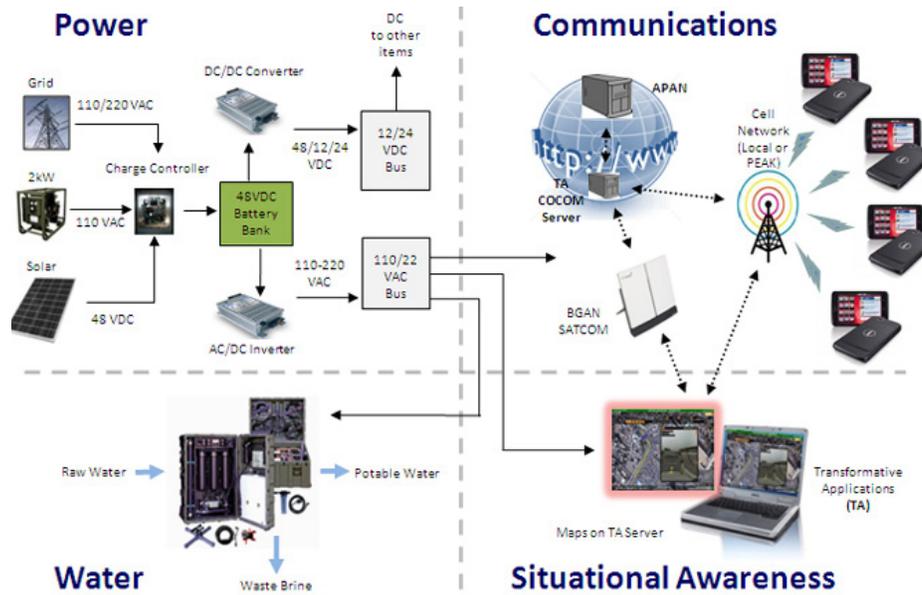


PEAK™ is an Aberdeen Proving Grounds tested, self-contained kit with onsite power, water purification and satellite communications capabilities built into an easy to transport ISU-60 container. Features include:

- 2.1 kW solar array with 2 kW auxiliary generator supplies continuous power to operate purification and communication capabilities 24-hours/day with additional power for other uses. AC/DC electricity available through the Load Center.
- Reverse Osmosis (RO) purification and desalination delivers 1,500 gallons (5,680 liters) of drinking water from virtually any source.
- Stand-alone communications enables up to 50 remote users to communicate and share information directly with the PEAK central command base. It can also be integrated into an existing cell network.
- 18 kWh Lithium-ion battery bank provides quiet power for nighttime operation.
- Transport by sling load, trailer, international shipping container or air.
- Easy to set up and fully operational in under 2 hours; ships fully charged to enable immediate operation.
- An environmentally friendly system capable of silent and pollution-free operation when using solar power and stored battery energy.
- No gasoline, diesel or external power source required for operation.
- Optional custom-designed trailer enables transportability of standard ISO-shipping containers and 463L pallet loads. Adaptable to civilian or military vehicles.
- Available in desert tan or OD green.



*Operation from solar power-only requires 5 hours of sunlight to enable 10 hour water purification operations or 3 hours of sunlight to enable 24-hour communications operations. Auxiliary generator input is included and to extend operation as needed.



CATEGORY	#	UNITS/DESC.	DATA US (METRIC)
OPERATING DIMENSIONS:		OPEN	Area for deployment of solar array, water purification, communications and container is 900 square feet. Each antennae site requires an additional 150-foot diameter open space.
TRANSPORT DIMENSIONS:		CLOSED	ISU-60 Container: 108 inches long, 88 inches wide, 60 inches high (2.7 meters long, 2.2 meters wide, 1.5 meters high)
WEIGHT:		DRY	Approx. 4,880 lbs (2,196 kg)
CONSTRUCTION:		VARIOUS MATERIALS	Structural aluminum container with vibration-dampened internal chassis to protect sensitive electronics and equipment
SOLAR PANELS:	12	TOTAL WATTAGE	2.1 kW crystalline solar array
AUX GENERATOR:	1	TOTAL WATTAGE	2.0 kW multi-fuel (diesel, JP-8)
BATTERIES:	12	CAPACITY	Lithium-ion 18 kWh bank (total) subdivided into 3 battery boxes. Data logger shows state of charge (SOC), hours of battery charge remaining, and battery bank status diagnostics.
DC/AC INVERTER:	3	VDC/VAC/kW	48VDC in: selectable output 120/60Hz VAC single phase, 220/50Hz VAC single phase, 220 VAC three phase. Up to 3kW peak, 6kW surge power, 415 watts sustained power with 5 hours of solar input; auxiliary generator input and generator are included.
DC/DC CONVERTER:	2	VDC/VDC/A	48 VDC in: selectable output 12 VDC/20A, 24 VDC/45A
CHARGE CONTROLLER:	1	CURRENT	MPPT, 80A. Data logger indicates solar energy collected, electrical power used by external loads, instantaneous power demand and daily power demand totals.
WATER FILTRATION & REVERSE OSMOSIS:		Up to 1,500 gallons (5,680 liters) per day	Source water purification from: fresh/light brackish up to 83 gph; standard seawater (34,000 PPM) up to 62 gph; heavy salt water (50,000 PPM) up to 41 gph. Data logger indicates water quality, filter maintenance, hours of operation and optimizes throughput flow.
COMMUNICATIONS:		Modular – component (qty)	GSM Network supporting two complete cell networks each with a BGAN terminal for satellite reachback. The cell sites can also be connected together via WiFi backhaul radios. Includes 50 SIM cards and 20 smart phones. Operating frequencies available: 850, 900, 1800, 1900 MHz.
TRAILER			7,000 GVW custom trailer designed to accept any ISU container or 463L pallet. Tandem axles, auxiliary hand brakes, military pintle hitch, LED lighting, custom cargo loading steps, and 12/24 VDC compatible. Available in 383 OD green or 686 Desert Tan.

* Patents
US #6,275,403
US #6,583,522
US #7,145,265
US #7,148,650

Last Updated
January 2013

Specifications: PEAK in ISU-60