

Tactical Water Purification System (TWPS)

*Increased Capacity/Reduced Footprint Water Purification System
Designed to Produce Potable Water from a Broad Range of Water Sources*



**Army Version
LHS/PLS (or similar) Deployment**

**Marine Corps Version
Covered Skid Deployment**



The Outdoor Venture TWPS provides a rapidly deployable water purification system capable of producing at least 1,500 gallons of potable water from a fresh water source and 1,200 GPH from a seawater source.

- Replaces 600 GPH ROWPU: 1 for 2
- 3 person, 2 hr set-up / 2 hr pack-up
- Minimal operator attention
- -25°F to +120° F operating range
- 23 hr water production / 1 hr PMCS
- 600 to 800 hrs of service between chemical cleanings
- Easily handles source turbidity as high as 500 NTU without loss of performance
- Micro-filtration excludes bacteria, cryptosporidian, and giardia
- Reverse osmosis produces potable water from high salinity seawater (up to 60,000 mg/L) in a single pass
- 20 year life, high reliability



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Features: All Models

- Replaces 600 GPH ROWPU: 1 for 2
 - Reduced force structure
 - Reduced logistics demand
 - Reduced footprint
- Micro-filtration
 - Automatic backwash
 - Operator attention not required
 - Handles all water sources
 - Reduces source turbidity as high as 500 NTU to less than 0.2 NTU
 - Excludes bacteria, cryptosporidian, and giardia
 - 600 to 800 hours service between cleanings has been demonstrated
- Reverse osmosis
 - Potable water from high salinity seawater (up to 60,000 mg/L) in a single pass
 - Sustained performance – no fouling
 - Individual element performance analysis
- Water production
 - 1,500 GPH from fresh and brackish waters at all temperatures
 - 1,200 GPH from normal seawater at all temperatures
- Power demand
 - 54 kW max w/out cold weather module
 - 59 kW max with cold weather module
- Operational Environment
 - To -25°F with cold weather module deployed
 - To +120°F without added protection
 - High humidity
 - Blowing rain
 - Blowing sand
 - NBC agent attack survivability with CAC cover deployed
- Deployment
 - 3 person, 2 hr set-up / 2 hr pack-up
 - 100 hr operation from BII except POL
 - 23 hr water production / 1 hr PMCS

Features: Army Model

- Mounted within LHS/PLS compatible ISO shelter with room for 60kW generator
- 23,000 lb fully packed out for deployment
- Fold-out 4' platform for extended shelter space when deployed
- Five 3k self-supporting product water tanks
- 1 motor-driven distribution pump
- 1 diesel-driven distribution pump
- Up to 250 GPM delivery through 4 nozzles
- Extended capability provided by modules included on-board
 - OISS (Ocean Intake Support Structure) to provide beach well water intake
 - Cold weather module
 - NBC post treatment module to handle agent contaminated sources
 - NBC survivability module
 - Cleaning waste storage

Features: Marine Corps Model

- Deployed as skid with general purpose cover
- 9,900 lb fully packed out for deployment
- Handled by 10k forklift
- Transported by MTRV truck
- Two 3k self-supporting product water tanks
- 1 motor-driven distribution pump
- Up to 125 GPM delivery through 2 nozzles
- Extended capability provided by modules based on mission requirements
 - OISS (Ocean Intake Support Structure) to provide beach well water intake
 - Cold weather module
 - NBC post treatment module to handle agent contaminated sources
 - NBC survivability module
 - Cleaning waste storage



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