

# Small Unit Water Purification System

The Small Unit Water Purification System (SUWPS) is designed to provide up to 100 gallons per hour of ultra-filtered water and up to 10 gallons per hour of drinking water from the reverse osmosis system. SUWPS is a fully configurable water purification system consisting of a pre-filtration module and a reverse osmosis module. The SUWPS can be used with the pre-filtration module only or the pre-filtration module and the reverse osmosis module can be tied together. The pre-filtration module can be either gravity fed or run in powered mode. The reverse osmosis module can process fresh or brackish water, and on request, can be configured for saltwater desalination. The system employs advanced pre-filtration and low energy reverse osmosis membranes to reduce the energy requirement of the system. The system is controlled with a power module that is multi-power capable, with included energy storage, and also has exportable power capabilities. The SUWPS modules are isolation mounted in ruggedized containers for transportability and durability in the field.

## Water Purification System Technical Specifications:

### Pre-Filtration System

- Stacked-disc pre-filtration: Two stages – 100 micron first stage; 50 micron second stage
- Ultra-filtration as third stage filter: Unique ultrafilter with integrated granular activated carbon for biological constituent removal and integrated silver for disinfection
- Can be run in both gravity fed mode and powered mode: Water production in gravity feed – 240 gallons per day; Water production in powered mode – up to 2000 gallons per day
- Fully cleanable and replaceable filters – easy replacement and easy maintenance
- Integrated storage space for tubing, electrical connectors and extra ultrafilters

### Reverse Osmosis System

- Fresh/brackish water, low energy reverse osmosis membranes standard; desalination membranes available
- Nominal Water Production – 240 gallons per day with brackish water; higher throughputs in fresh water; similar throughputs in desalination
- Granular activated carbon filter on produced water with integrated silver disinfection



- Integrated chlorine injection system for advanced disinfection
- On-line water monitoring of produced water for water quality assurance
- Integrated storage space for tubing, electrical connectors and chlorine for disinfection

## Electrical Control Box Technical Specifications:

### Multi-Power Capable

- Operating Voltage of System – 24-28 VDC
- Other power connections available, including:
  - 120 VAC, 60 Hz
  - 28 VDC via NATO Plug
  - 12 VDC from any source, including solar

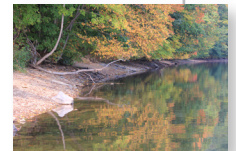
### 2 Sealed Lead Acid Batteries

- Energy Content – 35 Ah each
- System Run Time on Batteries Alone – Approx. 1 hour
- Lithium Ion batteries available

### Exportable Power System

- 200W DC/AC Inverter with two 120VAC plugs @ ~2 Amps

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