



Triton BWRO96

Key Data

Single-pass operation	65 m ³ /h (286 GPM)
Double-pass operation	27m ³ /h (118 GPM)
Ecolution® operation ¹	Up to 70 m ³ /h (308 GPM)
Recovery ¹	Up to 90 %
Rejection	Up to 99 %
Operating Water Temp.	10-40 °C (50 – 104 °F)
Electrical Efficiency ¹	<1.2 kWh/m ³

¹ Subject to feedwater TDS levels

Overview

Ecolutia Services operates the world's most efficient fleet of mobile water and wastewater treatment systems. Industrial and municipal customers trust our 24-hour, 365 days per year service for emergency, short-term or long-term use. The outsourced service assists in overcoming critical water issues, such as dealing with water scarcity, security of supply, treating raw water and reusing wastewater.

The Triton BWRO96 is our mobile brackish water reverse osmosis (RO) unit, incorporating a pre-treatment capability, within an ISO container. Each system has three modes of operation; single-pass, double pass and Ecolution®. In single pass a 65 m³/h (286 GPM) flow of treated water at 5-20 µS/cm

is achieved. However, for superior water quality needs the double-pass operation can achieve produce 27 m³/h (118 GPM) at <5 µS/cm. An additional feature of the Triton BWRO96 is its third mode known as Ecolution. On a feedwater of <500 TDS the RO operates at a higher recovery to increase flow while reducing waste. This patented process means the RO operates at up to 90% recovery, offering you substantial water efficiency savings. For optimal efficiency, the design of the full system array permits reconfiguring of the setup to match specific feed and product water requirements.

The integrated pre-treatment tanks allow custom loading of filter, carbon or ion-exchange softening media. The system includes on-line monitoring, automated backwash and regeneration sequencing for system control. Chemical feed systems are deployed for scale control to optimise performance and the fail-safe shut-down features ensure quality and quantity of water is maintained during operation.

Typical Applications

- Temporary or long-term water treatment
- Scheduled or unscheduled maintenance
- Full flow pilot plant testing and operations
- Seasonal or peak water consumption changes
- Improving ion exchange plant performance
- Plant commissioning water
- Power plant start-up
- Pipe flushing

System Features

- Up to 90% Recovery with patented Ecolution process
- Flexible system array customised to specific feed and product water requirements
- Remote monitoring capability
- VFD controlled high pressure feed pumps
- Fully automated backwash and regeneration sequencing on pre-treatment
- Materials of construction ensure higher salinity water treated with ease
- Pre and post-treatment options from portfolio range

Feedwater

Knowledge of the feedwater allows appraisal of the project. The table below offers some guidance:

Typical waters treated

Potable, well, river, lake, reservoir, contaminated, partially treated, food process, industrial process, industrial wastewater, municipal, municipal wastewater

Mobile Fleet

The Triton BWRO96 is part of a fleet of mobile water and wastewater treatment systems. By using the systems as modular building blocks, further treatment options are possible through use of our portfolio, which includes:

- **Atlas** – A 150 m³/h (660 GPM) MF system providing security against suspended solids breakthrough

Operating Parameters

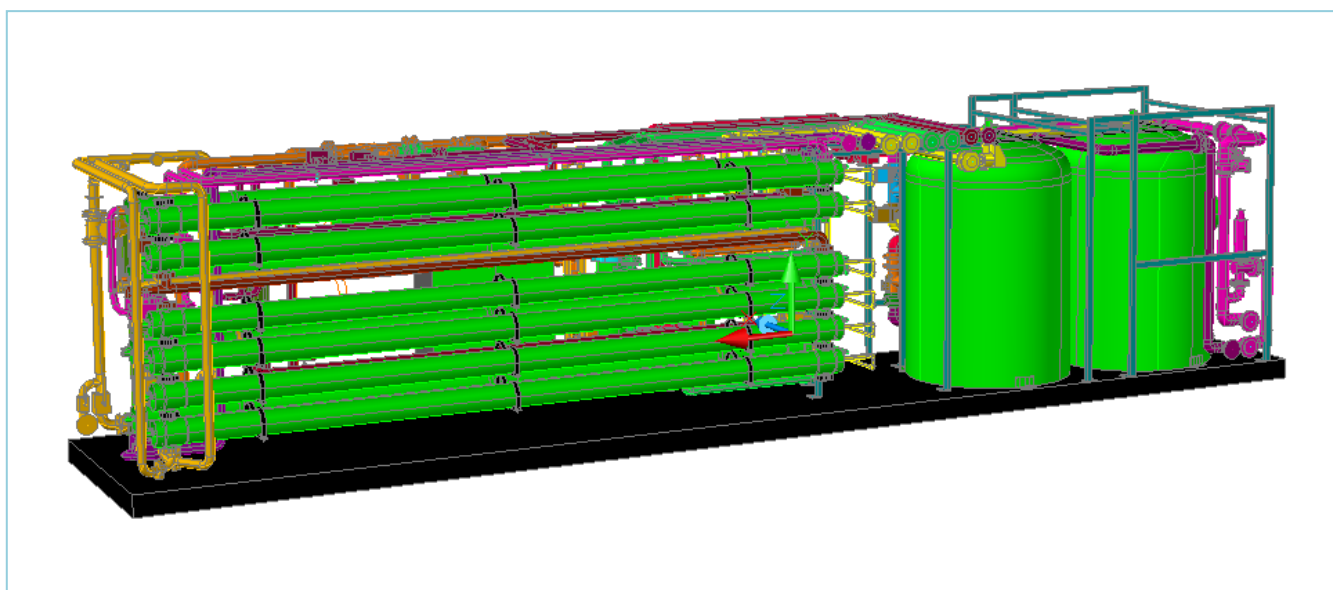
Length – Width - Height	12.2 - 2.5 - 2.9 m (40.0 - 8.0 - 9.6 ft)
Shipping Weight	20,000 kg (~44,000 lbs)
Operating Weight	25,000 kg (~55,000 lbs)
Min Inlet Pressure	5 bar (70 psi)
Max Inlet Pressure	7 bar (100 psi)
Feed Connector	DN 100 PN 16 (4")
Permeate Connector	DN 80 PN 16 (3")
Concentrate Connector	DN 50 PN 16 (2")
Power Requirements	380-460V, 50-60Hz, 180A
Installed kVA	110

- **Proteus Series** – Multi-media systems loaded for a range number of treatment options to produce up to 300 m³/h (1320 GPM)
- **Triton Series SWRO144** – A 60 m³/h (265 GPM) seawater RO, low energy consumption system
- **Volturnus Series** – A 50 m³/h (220 GPM) EDI system with integrated softening and gas removal to purify water to ultra pure levels

Service & Operation

Our systems are operated and maintained by our team of university graduate Field Service Engineers (FSEs). The team are fully trained and skilled in water treatment, plant operation and troubleshooting.

We are committed to the highest standards of customer service to meet your expectations. The FSEs have 24-hour technical back-up support, as well as our 'Project Execution Plan' which is our guide to project goals.



For a secure treated water supply contact Ecolutia Services