



Open Ocean – Portable Land-based 240V 50hz – Data Sheet

This reverse osmosis desalination plant will utilize a commercial grade, quality high pressure pump, close coupled (no belts) to a 1.85 kw, 240VAC, 50Hz, single phase electric motor. This supplies high pressure, pre-filtered sea water to a membrane array that produces a nominal 80 - 240 litres of potable water per hour from sea water at 25 degrees C and a salinity of 35,000 ppm, at an operating pressure of 800 – 850 psi.

The major components will be assembled pre-plumbed in a case. These components are universal in nature and many of them are available worldwide. Open Ocean keeps circuit boards, fancy controls and flashing lights off their products to provide the most **reliable** water maker possible.

Dimensions:

- Case size is approximately 1225mm long X 800mm high X 340mm deep
- A second case of the same dimensions is supplied containing various hoses and support equipment
- The primary case weighs approximately 80kg, and the support case weighs approximately 50kg
- The system is normally supplied with a 10m pick up hose that runs from the ocean to the boost pump.
- 30m hose from the boost pump to the system case as well as a 30m discharge hose to return seawater to the ocean.
- 15m hose to deliver fresh product water to storage tanks.

Specifications:

- 1.85 kW, 240VAC, 50Hz, single phase electric motor - motor starts up without load
- Direct coupled commercial quality high pressure pump
- Reverse osmosis membranes and 2000 psi carbon fibre pressure vessel modules
- Control panel suitable for dry or wet area mounting
- 240 Volt centrifugal sea water rated low pressure boost pump
- Washable 20 micron pre-filter for first stage filtration
- 5 micron jumbo polyester pleated **washable** pre-filter for cost effective long life filtration
- Fresh water flush facility
- Pressure relief valve – protects components from accidental over pressure situations
- Test, rejection and regulation valves
- All high pressure hose is 2500 psi nylon non corrosive tubing
- Open Ocean provide all operational components required.
- The system draws just under 13 amps in operation (around 2900 Watts). For remote location operation, it is recommended that a 4500 Watt or greater generator, or pure sign-wave inverter be used to power the system.



Control Panel and switches



High Pressure Pump and Motor

See the operational video at:

<http://www.openoceanwatermakers.co.nz/oxfam.html>

Land-Based System Layout

