The Oneka Solution – All-in-one desalination buoy

The movement of a buoy actuated by the motion of the swell is used to draw water from the sea and pressurize it through reverse osmosis membranes within the units.

A small portion of the buoy's pumping energy is used to pump water produced from the unit to the shore via a hose that is unfolded at the emergency relief site. The water is then redistributed locally or stored.



Drinking water supply transport hose



Details:

- Inflatable buoy
- All the components are on the surface
- Purely mechanical RO with energy recovery
- Min. Wave height for operation: 0.4m
- Output of 4,000 L/day with two units
- Each with a diameter of 1.7m & 350 kg mass

Buoy with the salt water intake & desalination components
All-in-one system

Energy / pumping*

Anchored to the seafloor

