RESEN WAVES are the first company in the World to provide continuous power and real time data connectivity to autonomous instruments and machinery in the oceans, as a plug and play solution.

It is now possible to access instruments in real-time through smart phones or a web application, no matter where the instruments are located in the big oceans. Electric power is no more a limitation.

Until now instruments and machinery in the sea are powered by batteries, PV or diesel generators, which require regular ship operation to replace batteries or supply of fuel and maintain diesel generators, which is costly and not always possible due to bad weather. Economizing power is normally done by cutting back on data transmission, which limits the applications of the instruments.

All these drawbacks are effectively solved by installing a Resen Waves power buoy in the sea where the power and data connectivity is required.

The buoy powers a battery pack on the seabed, through the mooring line. And the battery pack feeds power to the various instruments and machinery in the sea. Instrument data is logged from the buoy, through a fiber optic Ethernet connection in the mooring line, and the data is transmitted from the buoy to shore per satellite, 3G or 4G transmission.

### Applications
- Powers instruments and machinery
- Unmanned remote operations
- Offshore oil & gas
- Hydrographic
- Oceanographic
- AUV docking stations
- Whale monitoring

### Features and benefits
- Low weight
- Easy installation
- Plug & Play
- 24/7 operation
- No exchange of batteries required

### Options, power & data
- 24 and 48 V DC
- Iridium
- Inmarsat
- 3G or 4G
- Water depth + 200m
Specifications

**Buoy**
- Generator power: 300W continuous, 600W peak.
- Outer dimensions: L x W x H (cm): 170 x 170 x 100
- Dry weight: 250 to 350 kg
- Payload: 40 kg

**Operational conditions**
- Average wave height: Min. 1m, starts to produce power in ½m waves. See power curve for more detail.
- Water depth: Min. 10m and max. 200m
- Anchoring: Screw anchor or block