

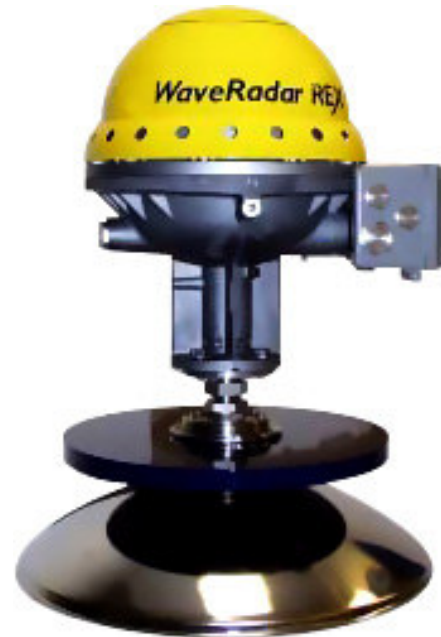


## WaveRadar Rex Wave and Sea Level Sen- sor

Microwave radar is a perfect medium for the extreme demands of the harsh offshore environment. The downward looking non-contact sensor uses a microwave radar technique to measure distance to the sea surface. Sampled at high frequency, the radar pulses provide an exceptionally stable and accurate measurement of sea surface profile. The microwave signals are very low in power and present no safety hazard. Information is continuously collected and processed to provide precision distance measurement outputs to a data bus. Output values can be displayed and stored to industry standards on a remote PC or may be interfaced to multi-parameter environmental monitoring systems. Output values can also be displayed on an optional remote display unit, model RDU40.

### Features:

- Stable in the most adverse
- Weather conditions
- Suitable for permanent or
- Temporary installation
- BASEEFA03ATEX or UL
- Accurate to mm precision
- No re-calibration required
- Optional remote display (RDU40)



## GENERAL

### Mechanical Features

*WaveRadar Rex* is a sensor with maximum tolerance to encrustation by salt, chemicals and other waste deposits. Experience has proved it to be reliable and trouble-free in operation, with minimum maintenance requirements. The transmitter head consists of a flame proof anodised cast aluminum alloy enclosure with an integral junction box. A weather protection cover is fitted to provide protection from direct solar heating

### WaveView Software

WaveView is an optional programme which processes raw WaveRadar Rex data outputs to calculate wave parameter and water level values for display and logging.

## TECHNICAL SPECIFICATION

### Performance

Measuring range	3-65 meters to surface
Accuracy	Range <50m = +/- 6mm Range >50m = +/- 12mm
Maximum deviation	Range <50m = +/- 1mm
Beam Width	10 degrees included angle

### Radar transmission

Transmitter frequency	9.7 to 10.3GHz (linear sweep)
Effective radiated power	<0.5mW
Antenna type	Parant (parabolic) reflector

### Data output

Data bus	Digital two wire FSK field bus Binary data output
Connector cabling	Eex "e" (non intrinsically safe)
Output data rate	2 to 10Hz (4Hz default) Factory selectable
Digital - from FBM	RS232 at 4800 baud
Type	8 data bits, no parity, one stop bit
Protocol	Simplex
Analogue output	1 x current loop
Range	4-20mA
Resolution	16 bits
Refreshing rate	4Hz (default)
Connector cabling	Eex "e" (non intrinsically safe)



Rietdekkerstraat 6  
2984 BM Ridderkerk

P.O. Box 60  
2980 AB Ridderkerk  
The Netherlands

Phone +31 (0)180 463 411  
Telefax +31 (0)180 463 530  
E-mail info@observator.com  
www.observator.com