

# WAVERADAR REX<sup>2</sup>

The latest development in reliable sea surface measurement

The *WaveRadar REX<sup>2</sup>* is the latest development in reliable sea surface measurement. It is significantly smaller, lighter, consumes ten times less power than its predecessor, and is fully backwards compatible with existing *WaveRadar REX* installations.

The *WaveRadar REX<sup>2</sup>* uses a 26 GHz radar sensor at its core, utilising *Emerson's* proven microwave FMCW technology. Higher frequency sampling enables a greater measurement range up to 80 metres from sea surface, with no loss of accuracy or precision. The unit benefits from fewer export restrictions than other microwave radar sensors.

An LCD screen enables in-situ sensor data and health checks, while the stainless steel and weather-resistant plastic construction maximises longevity in dynamic marine conditions.

With internationally recognised hazardous zone certifications, *WaveRadar REX<sup>2</sup>* can be used in almost any location around the world.

New software developments make motion-compensated wave measurement from both static floating platforms & moving vessels easier than ever, whilst allowing advanced configuration and health checking during deployment.



## KEY FEATURES

- **3-80m MEASUREMENT RANGE**
- **EXTREMELY LOW POWER**
- **REAL TIME DISPLAY**
- **COMPACT & LIGHTWEIGHT**
- **MULTIPLE OFFSHORE HAZARDOUS CERTIFICATIONS**
- **MINIMAL EXPORT RESTRICTIONS**



## GR FRAME

The GR frame is specifically designed for the *WaveRadar REX<sup>2</sup>*. It is designed to provide a stable, rigid platform that complements the high performance of the *Rex<sup>2</sup>*. It is designed to withstand the harshest conditions.

# TECHNICAL SPECIFICATIONS

\*Specifications subject to change without notice

## PERFORMANCE

Measurement Range: 3 - 80 m  
Accuracy: 3 - 6 mm  
Sampling Rate: 10 Hz  
Microwave Sensor Frequency: 26 GHz (open frequency)  
Automated error correction

## WARRANTY

18 months standard  
3 years extended  
5 years extended

## DATA & POWER

Output Data Rate: 2 - 10 Hz (user configurable)  
Data Output Format: Direct to RS485  
USB & Ethernet Connection Optional  
Power Supply: 9-36 VDC  
Power Consumption: Average 0.4 W, Peak 1 W

## SOFTWARE OPTIONS

*WaveConfigurator* set up software  
*WaveView Connect* processing & display software  
Motion Compensation extension for floating vessel installations

## HARDWARE

LCD sensor display  
*Weathershield* construction: SS316 & PTFE  
Sensor construction: SS316 & PTFE

## DIMENSIONS

Weight: Unpacked / Packed ~ 9 kg / 21 kg  
Size: Unpacked / Packed ~ 25 x 25 x 37 cm / 40 x 40 x 55 cm

## CERTIFICATIONS

Europe: E1 ATEX Flameproof: (FM15ATEX0055X)  
USA: E5 Explosionproof (XP): (FM-US FM16US0010X)  
Canada: E6 Explosionproof: (FM-C FM16CA0011X)  
International: E7 IECEx Flameproof: (IECEx FMG15.0033X)  
RoHS compliant lead-free PCBs  
Low cost uncertified version

## WAVEVIEW CONNECT

*WaveView Connect* software provides robust real-time processing of raw wave data from one or more sensors. The programme produces a full set of wave and tidal sea state parameters, which can be displayed locally, on the web, or output to third party applications. *WaveView Connect's* optional motion compensation extension enables high quality wave data from a moving vessel.

