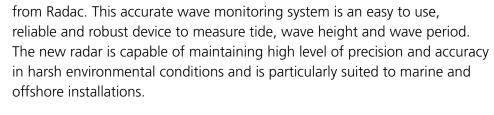


WAVEGUIDE HEIGHT & TIDE WG5 SERIES

Remote monitoring of wave height, wave period and tide





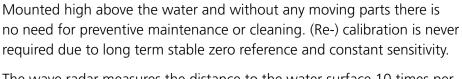
The new WaveGuide is the latest and most technically advanced radar

KEY FEATURES

- 0 60 m wave height
- 1 100 s range wave period
- Highly accurate
- Maintenance free
- Low power
- Optional ATEX / IECEx

NEW FEATURES

- Measuring at 10 Hz
- Single unit system
- Network connected
- Up to 5 years of internal data storage



The wave radar measures the distance to the water surface 10 times per second. In all wind and wave conditions the accuracy for water level is proven to be below 1 cm. The radar itself facilitates data acquisition, data processing, data presentation and remote service. Data will be internally stored on the device and distributed over the network. Any device connected to the (private) network can access the web-based user interface.



Elektronicaweg 16b 2628 XG Delft The Netherlands T +31 15 890 32 03 info@radac.nl www.radac.nl We are a Dutch company, based in Delft. Since 1996, we develop, manufacture and market the WaveGuide. We are proud that our professional systems are trusted across the industry. Our main clients include oil companies, offshore wind farm operators, port operators and shipping companies.



WAVEGUIDE HEIGHT & TIDE WG5 SERIES

PRELIMINARY SPECIFICATIONS

Heave Range: 2 - 75 m to surface Accuracy: $\pm 3 \text{ mm}^{-1}$

Frequency: 10 Hz

Water level Accuracy: ± 1 cm ^{2) 3)}

Processing: 10 min average (optional 1 min and 5 min)

Interval: 1 min

Wave height Range: 0 - 60 m

Accuracy: ± 1 cm 3)

Processing: SWAP 4) (per 20 min data block)

Interval: 1 min

Wave period Range: 1 - 100 s

Accuracy: ± 50 ms ³⁾

Processing: SWAP 4) (per 20 min data block)

Interval: 1 min

COMPACT VERSION: WG5-HT-CP

Mechanical Dimensions: Ø 265 x 245 mm

Weight: 12.5 kg

Material: Stainless steel, AISI 316L

Electrical Power: 24 - 65 VDC, 65 - 240 Vac, 8 W

Frequency: 10 GHz (X-band) Modulation: Triangular FMCW

Emission: 0.1 mW max. (Far below acceptable limits for exposure to the human body)

Environmental Temperature: -40 °C to 65 °C

Humidity: 0 - 100 %

Ingress Protection: IP67

Communication Network: 1x Ethernet

Data storage: SD 32 Gb

Optional: External converter to RS232 or RS422 or RS485

EXPLOSION PROOF VERSION: WG5-HT-EX

Mechanical Dimensions: 217 x 319 x 379 mm (d x w x h)

Weight: 12 kg (excl. antenna 2.8 kg)
Material: Chromatized aluminum

Electrical Power: 24 - 65 VDC, 65 - 240 Vac, 8 W

Frequency: 10 GHz (X-band) Modulation: Triangular FMCW

Emission: 0.1 mWatt max. (Far below acceptable limits for exposure of the human body)

Environmental Temperature: -40 °C to 65 °C

Humidity: 0 - 100 % Ingress Protection: IP67

Safety: ATEX, II 1/2 G Ex d [ia Ga] IIB T6 Ga/Gb

Communication Network: 1x Ethernet

Data storage: SD 32 Gb

Optional: External converter to RS232 or RS422 or RS485



- 2) For a water surface with waves.
- **3)** The accuracy of the wave parameters is not limited by the radar sensor, yet it is defined by the stochastic nature of sea-surface measurements.
- **4)** SWAP is the Standard Wave Analysis Program, in accordance with the applied standards of the Dutch Ministry of Infrastructure and Environment and of the International Association of Oil and Gas producers.



