

WaveGuide 5 Height & Tide

Our most plug and play wave radar to accurately measure wave height, wave period and tide. No water contact, no maintenance and no (re-) calibration. So no hassle.

This accurate wave monitoring system is an easy to use, reliable and robust device to measure tide, wave height and wave period. The sensor is capable

of maintaining high level of precision and accuracy in harsh environmental conditions and is particularly suited to marine and offshore installations.

Features and benefits

- Highly accurate
- Maintenance free
- Plug and play
- Severe conditions proof
- Optional ATEX / IECEx

- Measuring at 10 Hz
- 0 60 m wave height
- 1 100 s range wave period
- Network connected
- Up to 5 years of internal data storage



Mounted high above the water and without any moving parts there is no need for preventive maintenance or cleaning. (Re-) calibration is never required due to long term stable zero reference and constant sensitivity.

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.

We are Radac Technology leader in measuring waves by radar

Since 1996, our Dutch company develops unique sensors to monitor the ocean surface. Without water contact, moving parts or need for calibration, the wave radar is a maintenance free device. This makes us, truly an Opex free, high value



system provider. 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 5 Height & Tide

WG5 series

SPECIFICATIONS

Heave	Range: Accuracy: Frequency:	2 - 75 m to surface ± 3 mm ¹⁾ 10 Hz
Water level	Accuracy: Processing: Interval:	± 1 cm ^{2) 3)} 10 min average (optional 1 min and 5 min) 1 min
Wave height	Range: Accuracy: Processing: Interval:	0 - 60 m ± 1 cm ³⁾ SWAP ⁴⁾ (per 20 min data block) 1 min
Wave period	Range: Accuracy: Processing: Interval:	1 - 100 s ± 50 ms ³⁾ SWAP ⁴⁾ (per 20 min data block) 1 min

COMPACT VERSION: WG5-HT-CP

Mechanical	Dimensions: Weight: Material:	Ø 265 x 245 mm 12.5 kg Stainless steel, AISI 316L
Electrical	Power: Frequency: Modulation: Emission:	24 - 65 VDC, 65 - 240 Vac, 8 W 10 GHz (X-band) Triangular FMCW 0.1 mW max. (Far below acceptable limits for exposure to the human body)
Environmental	Temperature: Humidity: Ingress Protection:	-40 °C to 65 °C 0 - 100 % IP67
Communication	Network: Data storage: Optional:	1x Ethernet SD 32 Gb 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:	14.4 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





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1) Valid for a still water surface. 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.





We represent this supplier. For more information contact Observator Instruments:

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in Australia, Germany, the Netherlands, Singapore and the United Kingdom.

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