

Radar Doppler Surface Flow Sensor

Radar Doppler sensor for continuous level measurement of water surface flow

Application area

The Radar Doppler Surface Flow Sensor is the ideal sensor for all applications in water flow monitoring applications. It is particularly suitable for flow measurement in open flumes river and lakes as well as coastal areas. It is an economical solution through versatile and simple mounting options. The flood-proof IP 68 housing ensures a maintenance-free permanent operation. The usage of remote sensing technology eliminates the installation, corrosion & fouling issues associated with submerged sensors. Additionally, accuracy and performance are unaffected by changes in water density and atmospheric conditions. The Radar Doppler Surface Flow Sensor can be interfaced to either the LOG_aLevel Tide Gauge or to the ULS UltraLab Advanced Field controller. For applications where directional surface flow information is needed, a dual Radar Doppler Surface Flow Sensor set and an additional software module are necessary.





Your benefit

- Maintenance-free operation
- Extremely robust
- High plant availability
- High accuracy
- Results independent of ambient conditions
- Calibration-free
- Easily interfaced to LOG_aLevel system
- Direct interface to ULS UltraLab Advanced Field controller
- Dual Setup for directional surface flow measurements

Deployment on Offshore Platform in the North Sea, Germany.

General Acoustics Am Kiel-Kanal 1 24106 KIEL, GERMANY

Tel: +49 (0)431 / 5808180 Fax: +49 (0)431 / 5808189 www.generalacoustics.com info@generalacoustics.com

Technical data

Frequency:	24 GHz
Antenna pattern:	horizontal 11° (side-lobe suppression 15dB)
	vertical 11° (side-lobe suppression 15dB)
Measurement range	± 0.1 to ± 15 m/s (depending on flow
	conditions), higher range on demand
Resolution:	0.05 m/s
Accuracy:	0.1 m/s
Distance to water surface:	up to 40m (depending on flow conditions)
Necessary minimum wave-height:	3mm
Interface:	RS-485 (up to 230kBd)
Power supply:	6.5 32 VDC
Power consumption:	80mA (at 12 VDC)
Dimensions:	122x120x57 mm
Housing:	IP65 (higher IP on request), PC (UV stabilized)
Operating temperature:	-20°C to +65°C

The specifications depend on the sensor deployment angle.