

# SPEED SURFACE RADAR SENSOR RVM20

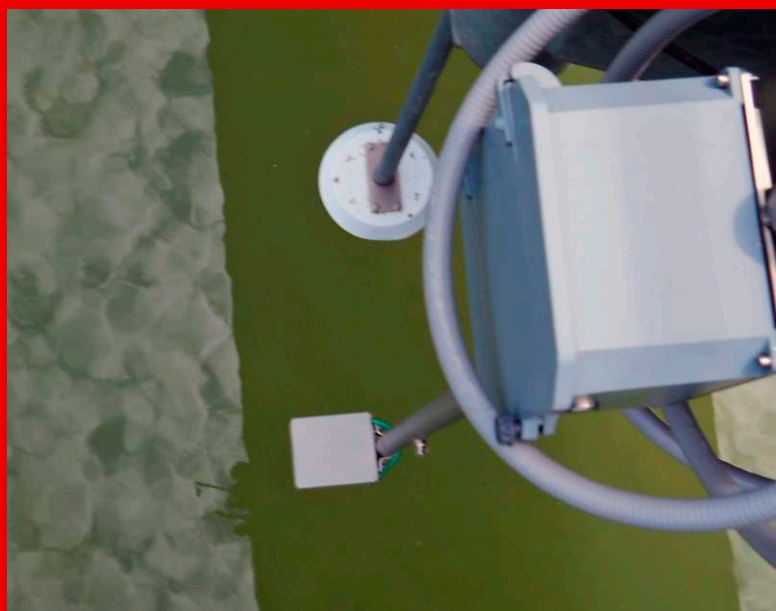
## TECNOLOGY AND OPERATION

The speed surface sensor RVM20 is designed for non-contact measurement of the average speed of a water stream using the principle of the Doppler effect.

The sensor analyzes and compares the frequency difference between the radiation emitted and the one reflected, determining the average speed of the local current in the measuring cone.

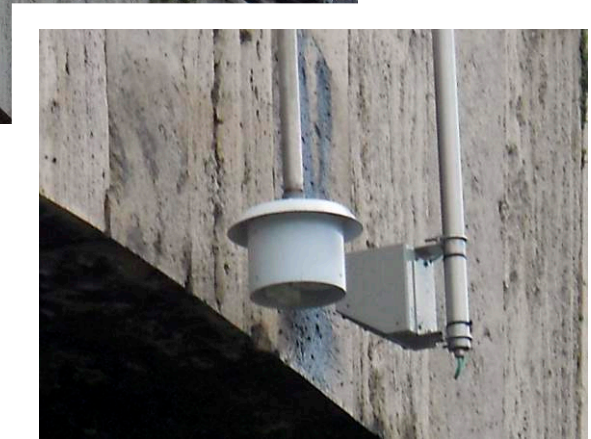
The optimum installation conditions consist in a stable profile section without significant bends in the immediate vicinity of the point of interest, possibly avoiding obstacles which could determine turbulence on the free surface of the water in correspondence of the mirror of measurement, such as stones, hydraulic jumps or artifacts in the river bed.

The amplitude of the sensor measuring mirror varies according to the distance from the water and its inclination to the vertical. The latter is automatically calculated thanks to a tilt sensor integrated in the sensor.



## TECHNICAL SPECIFICATIONS

- Measuring range: 0.30 to 15 m/s
- Accuracy:  $\pm 1\%$  of measurement,  $\pm 0.02$  m/s
- Operating Frequency: 24GHz
- Distance from water: 0.5 - 35 m



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