Surface flow velocity radar

SPR300W High-precision non-contact open channel flow velocity & level meter

APPLICATIONS

- Hydrological monitoring.
- Non-contact flow measurement.

KEY FEATURES

- Contactless, above the water, flow measurement.
- Surface flow velocity measured with radar sensor.
- Water level measured with ultrasonic sensor.
- Wide velocity measurement range.
- Distance measurement range from 0,5 to 10m.
- Long range operation.
- Compact, low-power design.
- Wide input voltage range.
- Supports variety of communications interface.
- Optional SDI-12.
- IP68-rated enclosure.
- K-band 24.125 GHz or 24.200 GHz radar option.
- Automatic mounting compensation.
- Configurable direction of the flow measurement.
- PC application for radar setup and live flow monitoring.
- Simple integration with existing SCADA or telemetry systems.
- Easy pole, wall or enclosure mounting.

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The *SPR300W* surface flow velocity radar is the ideal solution for non-contact measurements of surface flow velocity.

Its technology allows a quick and simple installation of the sensor on the water surface and requires minimal maintenance. It can be installed in rivers, canals or pipes.

Radars are rugged and durable as they are designed to withstand adverse weather conditions.

It is integrated by a tilt sensor and automatic compensation from which you can get the speed of the current.

The data measured by surface speed radar are recorded and analyzed by the **Smartyplanet web platform** thanks to its full compatibility.

Surface flow velocity radar
Specifications

Parameters	
Radar type	K- band 24.125 GHz / 24.200 GHz Doppler radar, 27 dBm EIRP
Beam angle	12º Azimuth 24º Elevation
Detection distance	50m
Speed range	0,02 m/s to 15 m/s
IP Rating	IP68
ELECTRICAL & MECHANICAL	
Power input	9-27 VDC
Power consumption	<1,35 W (typical 1W)
Maximal current	< 250 mA
Temperature range	-40 to +85 ºC
Enclosure dimensions	110 x 90 x 50 mm
INTERFACE	
Serial interface	1x serial RS485 half-duplex 1x serial RS232 (two wire interface)
Serial Baud Rate	1200 bps to 115200 bps
Serial protocols	ASCII-S GLX-NMEA
CAN Interface	Up to 1 Mbps CA 2.0
Alarm outputs	2 x open collector, max 50V 200mA
Connector	M12 circular 12-pin

FCC & CE APPROVED
EN 50293:2000
EN 61000-6-2, EN 61000-6-4:2007
EN 61000-3-2:2006+A1:2009+A2:2009, EN 61000-3-3:2008
EN 300 440-1, EN 300 440-2
FCC Part 15 Subpart C

Plug and play Installation

The design of this Station allows his installation under the concept ' to plug and play '. He places of simple form on posts, walls or poles, and his entail with the web of visualization is immediate and automatic.

Without complicated infrastructures

With the different models of station it will be able to create networks of sensors adapted to the needs of his sector, without need of complicated infrastructures not costly.

Better relation Cost - benefit

The new concept of station of sensors allows to have the best technology to monitor and to control his resources to a cost very lower than other existing alternatives on the market.

Visualization in web page

The control of the sensors is realized by means of a web application personalized with multiple functionalities as alarms, historical, multiple users, etc.. Accessible from any device connected to Internet.

Sensors Networks

The number of Stations to linking to his network is unlimited, being able to incorporate different models and configurations to form extensive networks that connect the information of his resources to Internet, to give response to the Smart cities of the future

Multiple sensors

There are multiple the precision sensors that can join. The model of Station selects depending on the type and I number of sensors that he needs.

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