

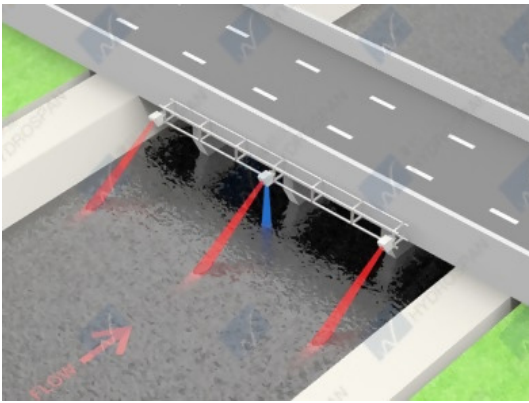
Non-Contact Radar Surface Velocity Flow Measurement Solution



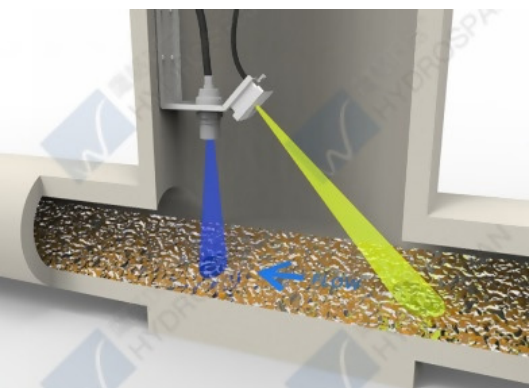
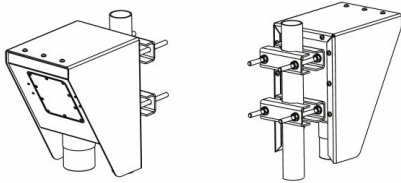
The RVFM-2-W flow meter uses radar technology to provide precise contactless measurement of surface flow velocity. Contactless radar technology enables quick and simple sensor installation above the water surface, and requires minimum maintenance. The RVFM-2-W flow meter is used to monitor flow velocity of open channels such as rivers, irrigation channels or sewer systems, and for monitoring and control of hydropower plants and wastewater treatment plants. The flow meter is also suitable for various mass flow metering applications in mining processing plants, industrial installations, and, due to operation without moving parts and robust mechanical design, is ideal for measurement of flammable fluids and harsh chemical applications.



The radar operates in K-band (at 24.125 or 24.200 GHz), and provides flow speed readings 20 times per second over serial (RS-232, RS-485) and CAN interfaces. Variety of supported communication interfaces and protocols enable easy integration with existing telemetry equipment and SCADA systems. Integrated tilt sensor measures inclination angle of the sensor and the flow velocity measurement is automatically cosine-corrected according to the measured mounting tilt angle.



The RVFM-2-W radar sensor is certified according to both EU and US standards, and is being used worldwide.



Xylem Water Solutions Australia Ltd
1/39 Aquarium Ave
Hemmant, QLD 4174
Australia

+61 1300 995362
salesaus@xyleminc.com
www.xylem-analytics.com.au

PRODUCT DESCRIPTION

- Contactless, above the water, flow measurement
- Built on robust radar technology
- Wide measurement range from 0,02m/s to 15m/s
- Long range operation up to 50m
- Compact, low-power design
- Wide input voltage range, suitable for solar applications
- Supports variety of communication interfaces (RS-232, RS-485, CAN, Alarm open-drain outputs)
- Optional SDI-12 support
- IP68-rated enclosure (for outdoor applications and harsh environments)
- K-band 24.125 GHz or 24.200 GHz option
- Automatic mounting angle compensation (cosine correction)
- 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

GENERAL

Surface Velocity Radar Type	K-band 24.125 GHz Doppler radar, 21 dBm EIRP
Surface Velocity Radar Beam Angle	12° Azimuth 24° Elevation
Level Radar Type	W-band 77-81 GHz FMCW radar
Level Radar Beam Angle	12°
Detection Distance	15 m / 30 m
Speed Range	0,02 m/s to 15 m/s
Speed Resolution	0,001 m/s
Speed Accuracy	1%
Level Resolution	0,5 mm
Level Accuracy	+/-3 mm
IP Rating	IP68

ELECTRICAL & MECHANICAL

Power Input	9 to 27 VDC
Power Consumption	<6,5 W (typical 5,2 W)
Maximal Current	< 750 mA
Temperature Range	-40°C to +85°C (without heating or coolers)
Device Outer Dimensions	150mm x 200mm x 250mm

INTERFACE

Serial Interface	1 x serial RS-485 half-duplex 1 x serial RS-232 (two wire interface)
Baud Rate	1200 bps to 115200 bps
Serial Protocols	Modbus/RS-485, GLX-NMEA, ASCII-S other available on request
SDI-12 Interface	Available as optional add-on module
Analog 4-20 mA Interface	Available on request

CERTIFICATES

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