

SVR

Surface Velocity Radar

Accurate Water Speed Measurement

Designed specifically to measure streams and rivers, the SVR gives you precise speed measurement from a stationary position outside the body of water. The SVR is perfect tool for flood and waste water management applications.

The SVR is extremely valuable for measuring water surface velocity during high-velocity flows and flood conditions where using contact measurement instruments poses a risk to safety.

Features

- Allows scientists to determine the surface velocity of water
- Includes cosine error correction, allowing the unit to compensate for vertical angles
- Wide velocity flow range (0.3 – 9.1 m/s)
- Replaceable AA rechargeable batteries
- Accepts tripod mounting
- User friendly measurement and reading
- Simple, more usable 5 digit display
- Data port for computer & data logger connection.
- Compatible with DLPU (Data logger Power Unit). System provides long operation time for SVR and SD-card based data logging with automatic date and time information
Optional GPS-module will provide GPS-coordinates for each measurement result.



SPECIFICATIONS

Measurement Specifications

Minimum Velocity	0.3 fps (0.3 m/s)
Maximum Velocity	30 fps (9.1 m/s)
Measurement Accuracy	5% of Reading

Factory Default Settings

Units	M/S (meters-per-second)
Horizontal Cosine	0°
Sensitivity	10

Antenna Parameters

Type	K-Band, IACP Type III
Nominal Transmission Frequency	24.150 Ghz
Nominal Horizontal Beam width	12°
Polarization	Circular
Nominal Microwave Power Output	7 mW
Maximum Aperture Power Density	<1 mW/cm ²

Environment

Ambient Temperatures	-22°F to +158°F, -30°C to +70°C
Maximum Humidity	90% relative humidity at 99°F (37°C) non-condensing

Water resistance meets International Robustness Standard IEC 529:1989 and European Community Standard EN 60529

Voltages

Supply Voltage Range	8.5VDC – 16.5VDC
Power Supply Frequency	replaceable NiMH batteries
Low Voltage Threshold	6.1VDC (battery) 8.5VDC (cord)

Power Consumption

Standby	0.105 amperes
Antenna ON no target displayed	0.170 amperes
Antenna ON anything displayed	0.172 amperes
Antenna OFF segment check "888"	0.116 amperes
Antenna ON segment check "888"	0.180 amperes

All currents measured at 13.8VDC with backlight on.