

## 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 a contact measurement instruments poses a risk to safety.

### Features:

- Touchscreen controls
- Allows scientists to determine the surface velocity of water
- Includes cosine error correction, allowing the unit to compensate for horizontal and vertical angles based on digital compass and inclinometer
- Wide velocity flow range (0.3 – 9.1 m/s)
- Replaceable & rechargeable Li-ion batteries
- Accepts tripod mounting
- User friendly measurement and reading
- Data port for computer.
- Optional SD-card based data logger with automatic date and time information. Optional GPS-module will provide GPS-coordinates for each measurement result.



Portable data logger with GPS-antenna.



Internal cosine error correction, allowing the unit to compensate for vertical angles up to 60 degrees

## 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° (+/- 1°)
Polarization	Circular
Nominal Microwave Power Output	7 mW
Maximum Aperture Power Density	1 mW/cm <sup>2</sup>

### 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	6.1 VDC (battery) 8.5 VDC (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.*