



Surface Velocity Radar for Measuring Open Channel Flow

- **Usage Type**
Fixed installation
- **Product Highlights**
Identify data influenced by sensor movement (e.g., wind, traffic) using meta data from integrated vibration and tilt sensors
- **Application fields**
Non-contact surface velocity radar
- **Internal data logger**
No
- **Measurement range**
0.08 ... 15 m/s (0.26 ... 49 ft./s)

OTT SVR 100 is a simple, non-contact, compact surface water velocity radar sensor. Designed for measuring flow in open channels and rivers where reliable velocity data is required continuously, during floods or periods of high concentrations of suspended sediments. The sensor is mounted above the water surface, away from floating debris using a flexible bracket for vertical or horizontal installation. Velocity measurements and sensor status information from the integrated vibration and tilt sensor is available via SDI-12 over RS-485 and Modbus. It is also compatible with OTT Prodis 2 software for system calibration.

| | |
|------------------------|----------------------------------|
| Measurement device for | Contactless velocity measurement |
|------------------------|----------------------------------|

Technical Data

OTT SVR 100

| | |
|--------------------------------|---|
| Measurement Range | 0.08 ... 15 m/s (0.26 ... 49 ft./s) |
| Resolution | 0,1 mm/s , (0.0001 ft) |
| Accuracy | ± 2% of measured value |
| Radar opening angle | 12° Azimuth 24° Elevation |
| Detection distance | 1 ... 50 m (3.3 ... 164 ft.) |
| Distance to water | 0.5 ... 25 m (1.64 ... 82 ft.) |
| Radar frequency | 24 GHz (K-band) |
| Interfaces | |
| Serial interfaces | RS-232, RS-485 |
| Protocols | SDI-12, MODBUS |
| Power supply | 9 ... 27 VDC |
| Power/current consumption | |
| active | typ. < 112 mA at 12 VDC |
| Maximum Current | < 250 mA |
| Dimensions | |
| (LxWxH) | 134,5 x 114,5 x 80 mm (5.3 x 4.5 x 3.2 in) (without mounting bracket) |
| Material | |
| Housing | ASA & Aluminium |
| Radom | TFM PTFE |
| Mounting | 1.4301 (V2A) |
| Rotation range of swivel mount | Lateral axis: ±90 ° Longitudinal axis: ±15 ° |
| Cable length | 10 m (32.8 ft) |
| Weight | |
| with mounting bracket | 820 g (1.81 lbs.) |
| without mounting bracket | 1530 g (3.37 lbs.) |
| Temperature, in operation | -40° ... +85°C (-40° ... +185° F) |
| Housing | IP 68 |

2-2

We reserve the right to make technical changes and improvements without notice. V-23/04/2024
OTT Hydromet GmbH, Germany

