

6527_DOF Flow Calculator Display Unit



The 6527_DOF Flow Calculator display unit is designed for use with the Starflow QSD 6527 and 6537 sensors. It is used to display velocity, depth, temperature and conductivity (model 6537) of water flowing in rivers, streams, open channels and pipes. The calculator display allows flow rate and total flow to be calculated and displayed. The flow calculator can calculate the cross-sectional area of partially filled pipes, open channel streams or rivers. For streams or rivers, it can input up to 20 coordinate points describing the river's shape of cross section.

The Starflow QSD sensor is a unique combination of water velocity, depth, conductivity and temperature instruments integrated within a solid state logger. It is a new generation of intelligent flow measurement systems

Featuring:

- 20 coordinate points to describe cross section of the river's shape
- One instrument can measure the velocity, depth and conductivity simultaneously
- Velocity Range: 0.02m/s to 12m/s bi-directional, accuracy is 1%
- Depth Range: 0 to 10m
- Measure velocity in both forward flow and back flow
- Depth is measured by both the pressure sensor and ultrasonic level sensor principles
- With barometric pressure compensation function
- IP68 Epoxy-sealed body design, designed for under water installation
- RS485/MODBUS output, connect to computer directly

SPECIFICATIONS

| SENSOR SPECIFICATIONS | |
|--|---|
| VELOCITY RANGE: | 20 mm/sec to 12 m/sec |
| VELOCITY ACCURACY: | ± 1% measured velocity |
| VELOCITY RESOLUTION: | 1 mm/s |
| DEPTH (ULTRASONIC) RANGE: | 20 mm to 5000 mm (5m) |
| DEPTH (ULTRASONIC) ACCURACY: | ± 1% measured |
| DEPTH (ULTRASONIC) RESOLUTION: | 1 mm |
| DEPTH (PRESSURE)RANGE: | 0 mm to 10000 mm (10m) |
| DEPTH (PRESSURE)ACCURACY: | ±1% measured |
| DEPTH (PRESSURE)RESOLUTION: | 1 mm |
| TEMPERATURE RANGE: | 0°C to 60°C |
| TEMPERATURE ACCURACY: | ± 0.5°C |
| TEMPERATURE RESOLUTION: | 0.1°C |
| ELECTRICAL CONDUCTIVITY (EC) RANGE: | 0 to 200,000 µS/cm, typically ± 1% of measurement |
| ELECTRICAL CONDUCTIVITY (EC) RESOLUTION: | ± 1 µS/cm May be recorded as a 16-bit value (0 to 65,535 µS/cm) or a 32-bit value (0 to 262,143 µS/cm) |
| TILT (ACCELEROMETER) RANGE: | ± 70° in roll and pitch axes |
| TILT (ACCELEROMETER) ACCURACY: | ± 1° for angles less than 45° |
| OUTPUT SDI-12: | SDI-12 v1.3, Maximum cable 50 metres |
| OUTPUT RS485: | Modbus RTU, Maximum cable 500 metres |

| ENVIRONMENTAL OPERATING TEMPERATURE: | 0°C ~+60°C water temperature |
|--------------------------------------|--|
| ENVIRONMENTAL STORAGE TEMPERATURE: | -20°C ~+60°C |
| ENVIRONMENTAL IP CLASS: | IP68 |
| CABLE: | The standard cable is 15 metres, the maximum option is 500 metres |
| SENSOR MATERIAL: | Epoxy-sealed body, Marine Grade 316 Stainless Steel Mounting Bracket |
| SENSOR SIZE: | 135 mm x 50 mm x 20 mm (L x W x H) |
| SENSOR WEIGHT: | 1 kg with 15 metres of cable |
| CALCULATOR SPECIFICATIONS | |
| TYPE: | Wall-mounted and Portable can be optional |
| POWER SUPPLY: | Calculator: 85-265VAC: 12-24VDC (only for wall-mounted type) |
| IP CLASS: | Calculator: IP66 |
| OPERATING TEMPERATURE: | 0°C ~+60°C |
| CASE MATERIAL: | Fiberglass (wall-mounted type) ABS (Portable Type) |
| DISPLAY: | 4.5" colour LCD |
| OUTPUT: | Pulse, 4-20 mA (Flow & Depth), RS485/Modbus, Datalogger, GPRS |
| SIZE: | 270 L x 215 W x 175 H (mm) |
| WEIGHT: | 3 kg |
| DATA STORAGE: | 16 GB |
| APPLICATION: | Partially Filled Pipe: 150-6000 mm; Channel: width >200 mm |