

DOF6000

SERIES FLOWMETER



Lanry | Professional Manufacturer of Ultrasonic Flowmeters



The DOF6000 series flowmeter consists of Flow Calculator and the Ultraflow 6537 Sensor, It is used to measure water velocity, depth, pressure temperature and conductivity of water flowing in rivers, streams, open channels and pipes.

When used with a companion Lanry DOF6000 Calculator, flow rate and total flow can also be calculated. The flow calculator can calculate the cross-sectional area of partially filled pipes, open channel streams or rivers, for stream or river, with up to 20 coordinate points describing the river's shape of cross section. It is suitable for various applications. Ultraflow 6537 Velocity and level Sensor is a unique combination of water velocity, depth, pressure, conductivity and temperature instruments integrated with 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: 0.02mm/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
- Portable type with rechargeable battery can work up to 50 hours.

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: 85-265VC: 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 |