



## DOF Ultrasonic Doppler Open Channel flowmeter Wall-mounted Serials



DOF Ultrasonic Doppler Open Channel flowmeter  
Wall-mounted Serials

### OVERVIEW

This DOF Ultrasonic Doppler Open Channel flowmeter is a compact, easy-to-use system for measuring the velocity and depth of water in rivers and streams, open drainage channels, and large pipes.

It is suitable for use in a wide range of water qualities ranging from sewage and wastewater to clean streams, potable water, and even sea water. The instrument measures forward and reverse flow conditions and may be programmed to computer flow rate and total flow in pipes and open channels.

Water velocity is measured by the ultrasonic Doppler principle which relies on suspended particles or small air bubbles in the water to reflect the ultrasonic detector signal. The instrument will not operate in very clean, degassed water. Water depth is gauged by a hydrostatic pressure sensor, referenced to atmospheric pressure through the vented power and signal cable.

### Specifications

#### Velocity

Range: 21mm/s to 4500mm/s bi-directional

Accuracy: 2% of measured velocity

Resolution: 1mm/s

Depth: 0 to 5m in two ranges

#### Resolution

Range: 0m to 2.0m to 5.0m

Accuracy: Typical  $\pm 0.25\%$



### **Temperature**

Temperature or display device : -17°C to 60°C

Resolution: 0.1°C

### **Flow**

Computation: Flow rate, totalised flow

Channel type: Pipe, open channel, natural stream

### **Integrated micrologger**

Storage memory: 512kB, CMOS RAM

Log interval: Programmable, five seconds to one week

SDI-12: 1200 bps instrument channel

Communication: RS-232, 300-38400 bps

Control: CMOS output trigger (water sampler)

### **General**

Cable: 15 metre, 9 way vented, <<SQL>> compatible

Cable Options: User specified up to 100 metres

Power source: External battery 12V DC

Power usage: 11.5 to 15V DC, 50µA standby, 200mA active,  
90mA communications

Operating Temp for transducer: 0°C to 60°C water temperature

Material: PVC body, stainless steel mounting plate

Dimensions: 290mm x 70mm x 30mm (LxWxH)

Weight: 1kg (2kg with 15m cable)



Applications Pictures



TOOLS  
Measuring





TOOLS **BEHROOZ**  
Measuring

