Partially Filled Pipe & Open Channel Flowmeter DOF6000

General:

The DOF6000 series flowmeter consists of Flow calculator and the Ultraflow QSD 6537 Sensor.

The Ultraflow QSD 6537 Sensor is used to measure water velocity, depth, 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 pipe,open channel stream or river,for stream or river, with up to 20 coordinate points describing the river' s shape of cross section. It' s suitable for various applications.

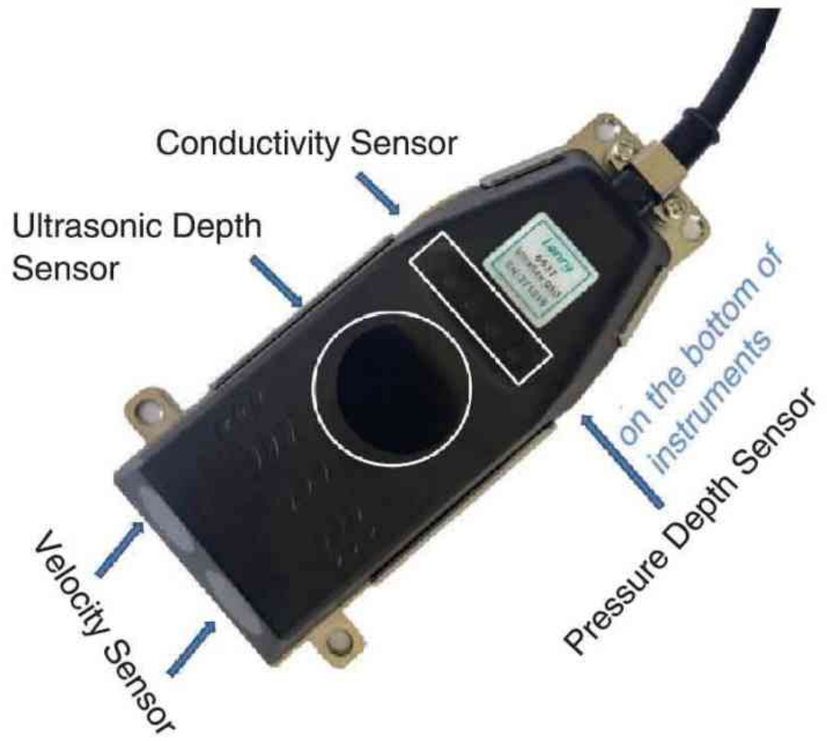
DOF6000–W (Wall–mounted type)

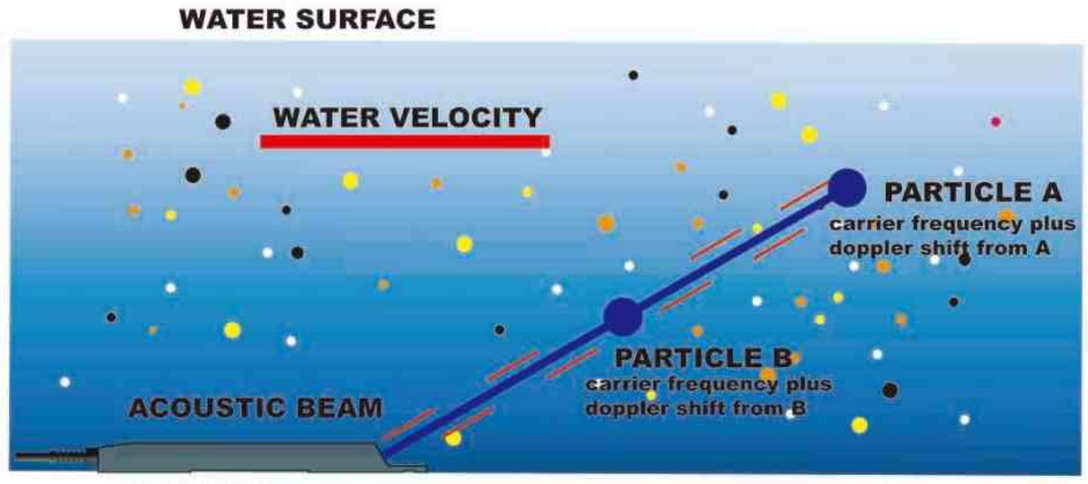
DOF6000–P (Portable type)

Features:

- 20 coordinate points to describe the river´ s shape of cross section.
- One instrument can measure the velocity, depth,conductivity and temperature simultaneously.
- Velocity range : 0.02mm/s to 12m/s bidirectional, 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.
- Separate sensor is with RS485 modbus/SDI–12 output to connect computer dircetly.

Principle of Measurement:





DOF6000 sensor

Application:

- Partially filled pipes
- River and stream
- Irrigation
- Culvert
- Water treatment
- Industrial waste
- Channel
- Sewage treatment
- Environmental monitoring

Specification:

Calculator:

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℃~60℃
Case material	Fiberglass (wall-mounted) ; ABS (portable)
Display	4.3'' color LCD
Output	Pulse, 4–20mA(Flow&Depth), RS485/Modbus, Daatalogger, GPRS
Size	244×196×114mm(wall-mounted); 270×215×175mm(portable)
Weight	2.4kg (wall-mounted); 3kg (portable)
Data logger	16GB
Application	Partially Filled Pipe: 150–6000mm; Channel: width > 200mm

Sensor:

Velocity	Range	20mm/sec to 12m/sec Bidirectional velocity capability, set using configuration tools
	Accuracy	± 1%R
	Resolution	1mm/s
Depth (Ultrasonic)	Range	20mm – 5000mm (5m)
	Accuracy	± 1mm
	Resolution	1mm
Depth (Pressure)	Range	0mm to 10000mm (10m)
	Accuracy	± 2mm
	Resolution	1 mm
Temperature	Range	0℃ – 60℃
	Accuracy	± 0.5℃
	Resolution	0.1℃
Electrical Conductivity (EC)	Range	0 to 200,000 µS/cm, Typically ± 1% of measurement
	Accuracy	± 1%R
	Resolution	± 1 µS/cm
	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.
	Accuracy	± 1° for angles less than 45°
Output	SDI–12	SDI–12 v1.3, Max. cable 50m
	RS485	Modbus RTU, Max. cable 500m
Environmental	Operating temperature	0℃ ~+60℃ water temperature
	Storage temperature	–20℃ ~+60℃
	IP class	IP68
Others	Cable	The standard cable is 15m, the maximum option is 500m.
	Sensor material	Epoxy–sealed body, Marine Grade 316 Stainless Steel Mounting Bracket
	Sensor size	135mm x 50mm x 20mm (L x W x H)
	Sensor weight	1kg with 15m of cable

Configuration Code:

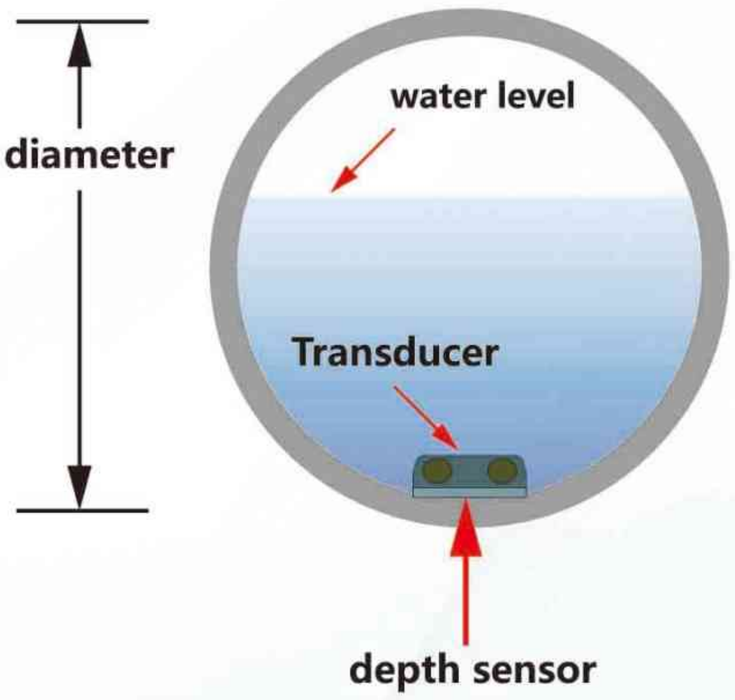
DOF6000	**Doppler Open Channel Flowmeter**		
	Calculator		
	W	Wall-mounted	
	P	Portable	
		Power supply	
		A	85-265VAC
		E	24VDC (only for Wall-mounted Calculator)
		Output	
		N	None
		C	4-20mA
		P	Pulse
		F	RS485 (Modbus)
		D	Data logger
		G	GPRS
			Level range
			6537 0 to 10m
			Sensor cable length
			15m 15m (standard）
			XXm more length, please contact us.

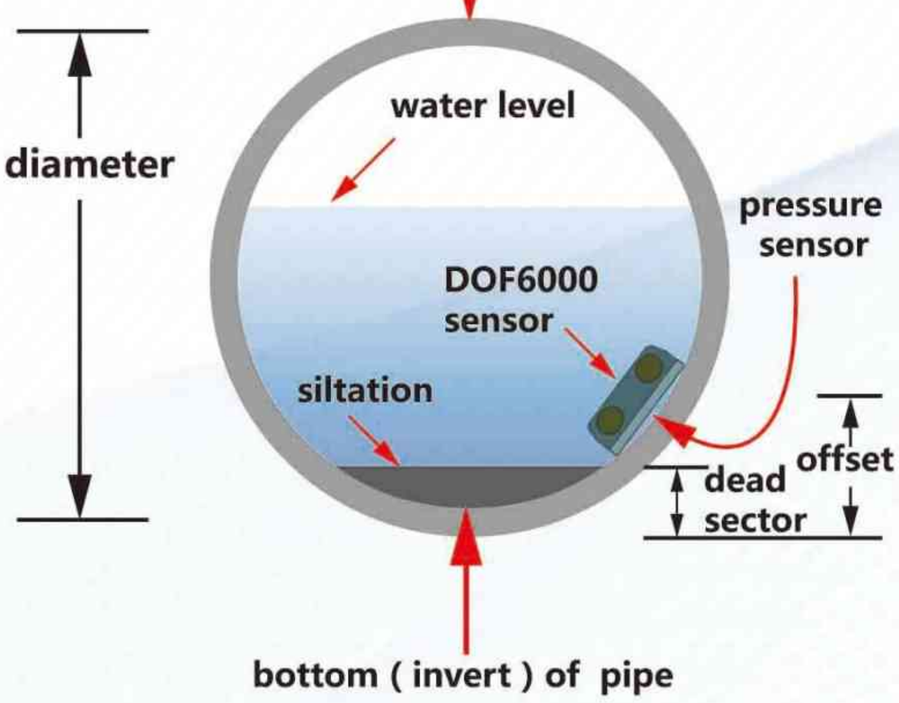
DOF6000 – W – A – N / VL –6537 –15m (example configuration)

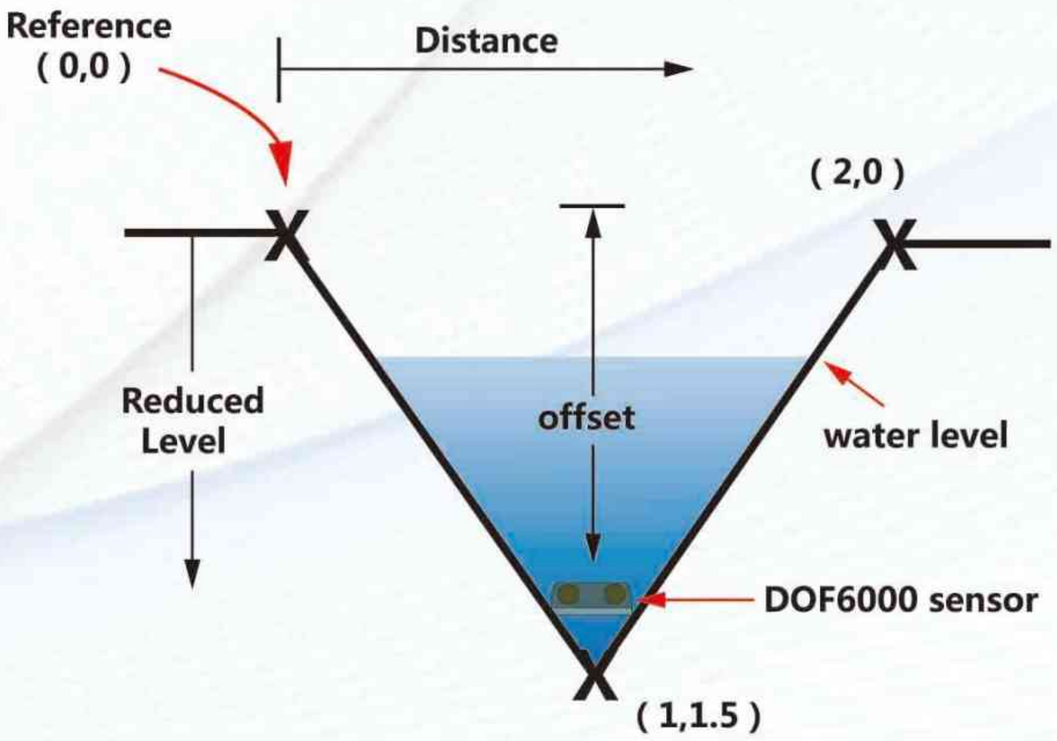
Description:

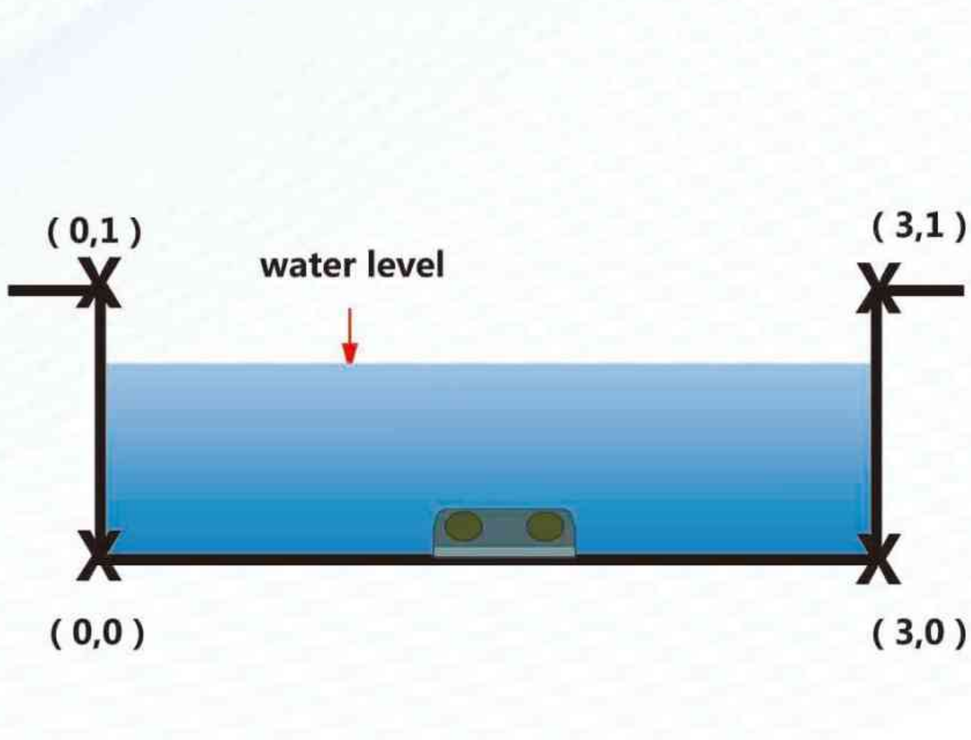
Wall mounted Doppler Open Channel Flowmeter; Power supply: 85–265VAC; output:none; Sensor level range: 0–10m; 15m sensor cables.

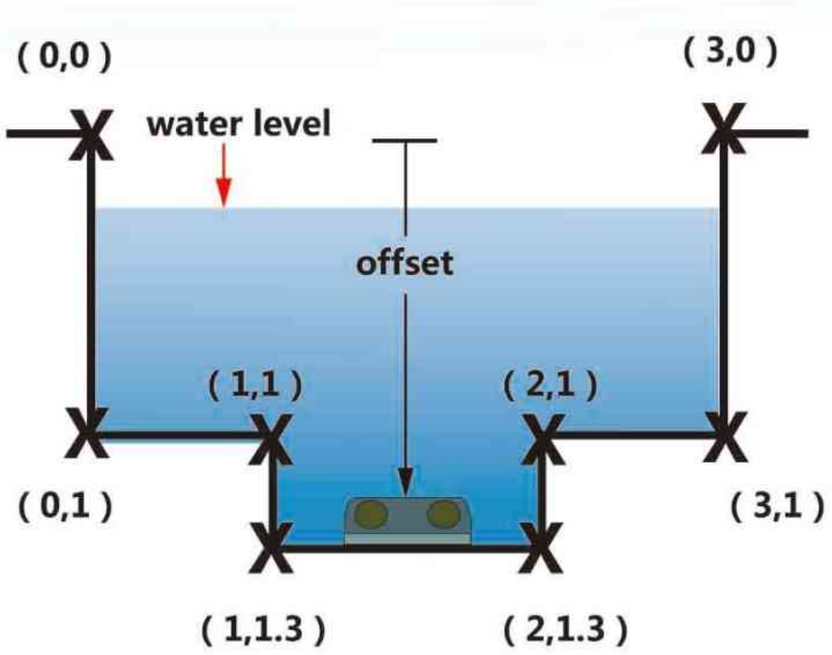
DOF6000 Sensor Installation Details:

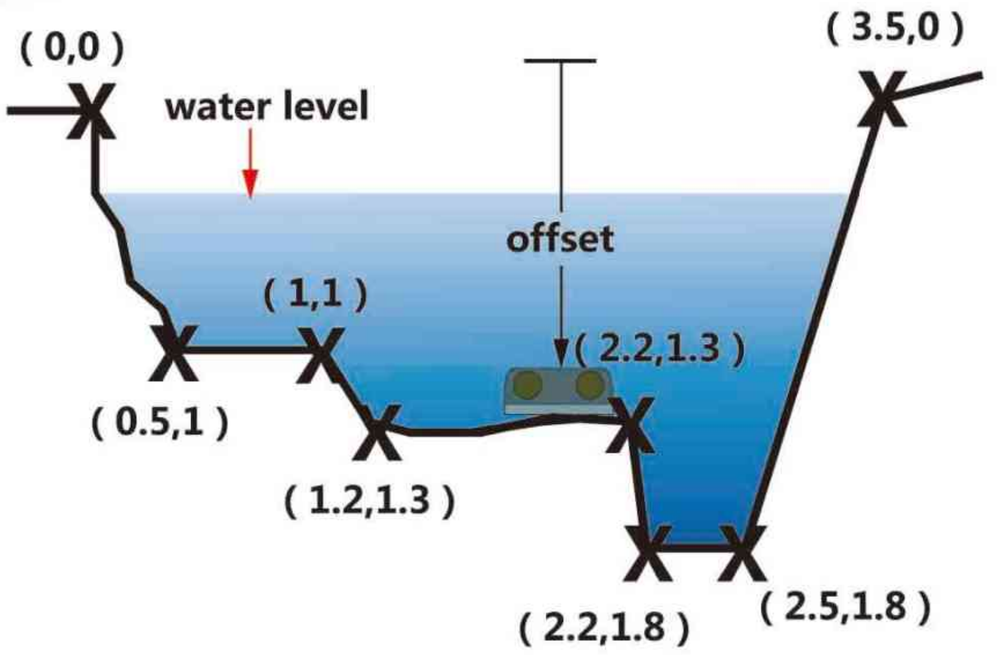












Application Pictures: