

# ORAKEL

SYSTEM

## NON-CONTACT FLOW MONITORING SYSTEM

The ORAKEL Non-Contact Flow Monitoring System is a complete solution for measuring and monitoring the flow of water, where the submersion of sensors is prohibitive or undesirable.



### KEY FEATURES

#### ORAKEL Analyser

- A compact electronic control and communication system
- 4" colour screen with nine-button keypad for control and data entry
- Analogue inputs for 4-20mA sensors
- Analogue outputs for data loggers and SCADA systems
- Multiple language selection
- IP65 splash-proof casing
- Internal SD card logging

#### Radar Velocity Sensor

- Uses microwave technology to accurately measure velocity
- Excellent stability, accuracy and repeatability
- Loop powered
- ATEX Zone 1 approved with appropriate equipment

#### Ultrasonic Level Sensor

- Sophisticated method of determining surface level and therefore depth
- High performance echo discrimination
- Loop powered
- Easily fine-tuned to the site parameters
- ATEX Zone 1 approved

### ACCESSORIES

All are supplied with a stainless steel mounting bracket and thermal shroud.

#### Optional Accessories

- ATEX Zone 1 galvanic isolator and sealed enclosure
- Multichannel data logger
- Full Detectronic Datacentre package



DETECTRONIC

[www.detectronic.org/orakel](http://www.detectronic.org/orakel)

## APPLICATIONS

The **ORAKEL Non-Contact Flow Sensor** is designed for open-channel flow applications where no existing primary measurement device, such as a weir or flume, exists.

- Permanent and portable sewer monitoring programs
- Wastewater treatment plants
- Industrial process measurement
- Irrigation channels
- Effluent flow measurement
- Spill monitoring
- Combined Sewer Overflows (CSO)
- Sanitary Sewer Overflows (SSO)
- Event Duration Monitoring (EDM)

## TECHNICAL SPECIFICATION

### ORAKEL Analyser

Power: 100-240VAC/0.25A or 12VDC/0.8A.

Inputs: up to 4 configurable sensor inputs. 2 slots populated with 4-20mA analogue input cards.

Outputs: up to 4 configurable outputs. 3 slots populated with 4-20mA analogue output cards.

Dimensions: 309 x 230 x 103mm.

Weight: 2kg.

IP Rating: IP65, Nema 4X.

Enclosure Material: flame retardant ABS.

### Ultrasonic Level Sensor

Loop powered: 4-20mA.

Range: 0.125-3m.

Accuracy: 2mm.

IP68 sealed.

Ex mb ATEX certified.

Programmable with HART modem.

Dimensions: 77mm dia. x 134mm.

Weight: 1kg.

Operating range: -40°C to 80°C.

### Radar Velocity Sensor

Loop powered: 4-20mA.

Range: 0.2-6.0m/s.

Accuracy: +/- 1.5% or 0.03m/s, whichever is greater.

IP68 sealed.

ATEX Zone 1 certified

with Detectronic-approved galvanic isolator.

Programmable with HART modem.

Dimensions: 90mm dia. x 140mm.

Weight: 0.7kg.

Operating range:  
-20°C to 60°C.



## THE ORAKEL SYSTEM

The **ORAKEL System** is an all-in-one measuring solution. Created as a modular system, with ORAKEL you can stop using multiple systems and **measure every parameter you need with just one solution.**

To learn more about the **Detectronic ORAKEL System** and how it can help your business, get in touch:

Call: **+44 (0)1282 449 124**

Email: **sales@detectronic.org**

Visit: **www.detectronic.org**

