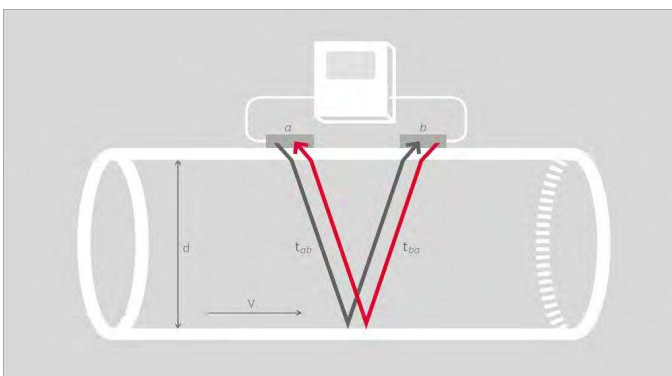


## IFX-P210 - Battery operated Clamp-On Ultrasonic Flow Meter Designed for temporary site installation



- Portable, compact flow meter designed for applications requiring rugged and waterproof instrument
- Large battery capacity intended for long-term installation in remote areas where access to power is limited and exposure to the elements is likely.
- Robust and sealable IP67 housing granting measurement and instrument safety.
- Easy and fast to install thanks to non-invasive sensors based on transit time ultrasonic principle.
- One sensors pair to cover any process pipe from DN 50 to DN 3000
- Integral logger allowing up to 1.000.000 of measured data storage,
- Modular battery packages and different operational mode to extend unattended site measuring life up to more than 3 months.
- Suitable for a variety of applications from water network for leak detection and district metering, to temporary replace in line flow meter, to industrial installation on corrosive or dangerous media.
- Delivered with dedicated software for data download and management.
- Optional 4-20 mA, pulse or relay process output.
- Optional magnetic rail or mounting accessory,
- Optional integral wall thickness gauge
- Works also connected to mains.

### Measuring Principle



Transit time measuring principle.

Sensors "a" and "b" work alternately to send and receive ultrasonic pulses.

The sound waves "a" to "b" travelling with the flow move faster than those "b" to "a" travelling against it; the time difference is the flow velocity.

Figure shows typical V reflection mounting, where sensors are installed on the same external side of pipe, different installation ways can be used to manage different pipe size and material.

## Technical Data IFX-P210

Measurement principle	Ultrasonic transit-time difference
Measurement type	on line non-invasive
Flow velocity range	+/- 0.01 ... 25 m/s
Resolution	0.25 mm/s
Repeatability	0.15 % of measured value, ±0.015 m/s
Accuracy Volume flow:	±1 ... 3 % of measured value depending on application ±0.5 % of measured value with process calibration
Flow velocity (mean):	±0.5 % of measured value
Measurement rate	100 Hz (standard)
Pipe diameter range	(25 mm) 50 mm to 3000 mm (larger pipe based on material)
Temperature range for sensors	-30 °C to +130 °C (-22 °F to +266 °F)
Housing	Rugged integrated IP 67 - portable
Display	LCD display and full keypad
Battery life	up to 100 days with internal battery
Power supply	1, 2 or 3 x LiFePo4 12.4 Ah
Power adapter:	100 ... 240 V AC input, 9 V DC output
Operating time	1 Cell - up to 7 days continuous operation, 30 days in hibernation mode* 2 Cells - up to 14 days continuous operation, 60 days in hibernation mode* 3 Cells - up to 21 days continuous operation, 100 days in hibernation mode* Unlimited when connected to main through the battery charge port
Dimensions	260 (h) x 280 (w) x 200 (d) mm
Weight Approx.	6.0 kg
Operating languages	English, Spanish, Italian (other on request)

\*Based on normal operating conditions, with no process output enabled.

## Features

- Three different operating modes to maximize battery life
- IP 67 for both flow meter and sensors
- Process output options including current, open-collector, relay
- Large data logger and software for sampling and data transfer
- Simple installation, operation and data download

## Technical Data K1N sensor

Pipe diameter range	50 ... 3,000 mm
Dimensions of sensor heads	60 (h) x 30 (w) x 34 (d) mm
Material of sensor heads	Stainless steel
Material of cable conduits	Stainless steel
Temperature range	-30 ... +130 °C (-22 ... +266 °F)
Degree of protection	IP 67 according to EN 60529 (IP 68 on request)
Standard cable length s	4.0 m



## Accessories

- Up to five process output options
- Optional pipe wall thickness gauge
- Software for data downloaded and evaluation
- Magnetic mounting rail (side pictured)
- Optional wireless data transmission



**Isoil Industria spa**  
Via F.lli Gracchi 27  
20092 Cinisello Balsamo MI – Italy  
Email : sales@isoil.it  
www.isoil.it