

CLAMP-ON FLOW MEASUREMENT

For hydropower and water supply

Compact – Easy – Worth your Investment

Additional Values

- Pre-set Leak Detection System
- Silt monitoring

Benefits

- Temporary or permanent installation
- Easy to install
- High repeatability of measured values
- Multi pipe section (1 Instrumentation Controller– up to 4 pipes)

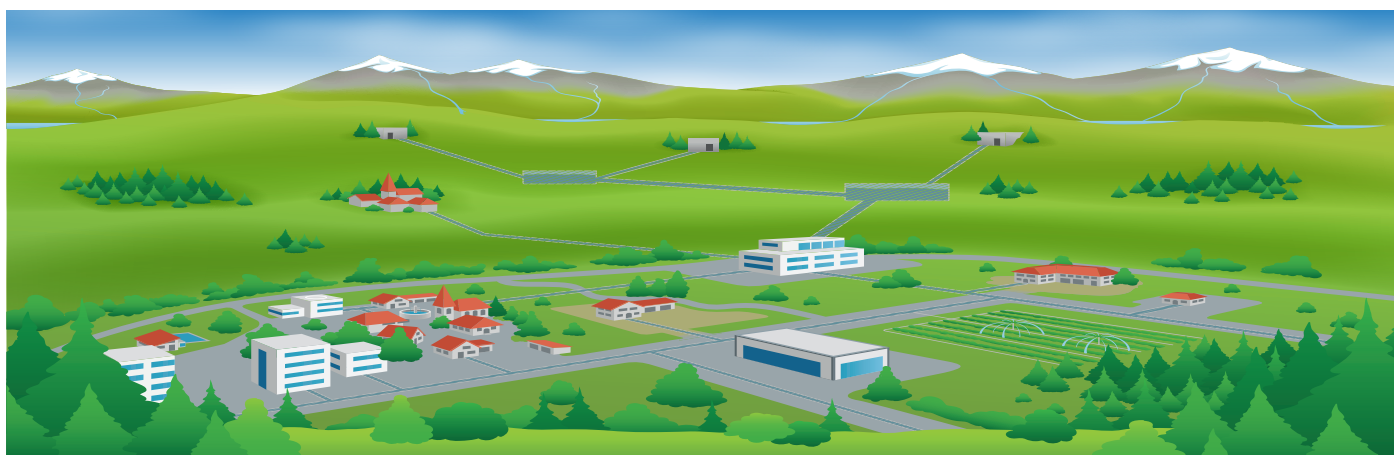
Description

The RISONIC clamp-on system is based on the same architecture and operational design as all other RISONIC applications.

Clamp-on sensors are designed for non-intrusive flow measurement in situations where pipes cannot be dewatered or drilling of the pipe for permanent installation is not feasible. The clamp-on sensor measures the flow through the pipe wall at very high levels of accuracy and repeatability. In addition, installation is very quick and easy – whether for temporary or permanent use.

Several 100 RISONIC clamp-on solutions are in operation all over the world. The RISONIC clamp-on system features a magnetic mounting frame for the sensors which allows for very easy commissioning.

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FEATURES AND ADVANTAGES

- Non-intrusive ultrasonic flow measurement - no drilling into pipe and no interruption to operations
- Easy installation with magnetic sensor frames, adhesive mounting or mounting straps
- Multi pipe section – 1 RISONIC clamp-on controller can control up to 4 different pipes and diameters
- Price/Performance – highly accurate measurement with 1 or 2 measuring paths (multi paths also supported)
- Includes a pre-set leakage detection system and other applications such as total flow, sediment monitoring and advanced mathematical calculations
- Bi-directional flow measurement (pumped storage hydro power plants)
- Easy configuration via web interface communication (TCP/IP)
- Remote diagnosis
- IEC 60870-5-104 and Modbus RTU/TCP communication
- Carry-on metering case with possibility for battery-powered operation



Clamp-on transducers	200 kHz	IP65 for pipe size	3 m – 6 m
	500 kHz	IP65 for pipe size	0.6 m – 3 m
	1 MHz	IP65 for pipe size	0.08 m – 0.6 m
Water flow (max.)	$\pm 0 \dots 20$ m/s Bi-directional flow measurement		
Accuracy	1% of measured flow (depending on the hydraulic situation)		
Pipe diameter	0.08 m ... 6.0m		
Pipe wall thickness	1 mm ... 60 mm		
Pipe material	Various metals and other materials		
Measuring paths	1 or 2 paths per section, more on request		

