

# Velocity and Echo Profiles for Laboratory Setups and Industrial Pipes

#### **Features**

Velocity and backscattered intensity profile measurement by
high accurate pulsed coherent Doppler (UVP)

- Compact and splash-proof enclosure adapted to harsh environments
  - Internal **battery** and **wifi** connection
    - Ergonomic embedded **web interface** for setting up, observing **real-time** data and recording
  - Control of a wide variety of external transducers
  - High quality measurements
  - High spatial and time resolution

## **Applications**



- Sediment and suspension monitoring in flumes and pipes
- Laboratory studies
- Turbine and marine current turbine calibration
- Complex fluids studies
- CFD input and validation
- Industrial process optimization
- Food engineering process control
- Reactor monitoring

Our devices are available for rent, for lease and for sale.

### **Contact**



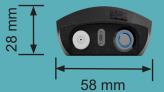
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## **Technical specifications**

	Measurement Performances		
	Sampling range	0.005 to 4 m	
	Number of cells	2 to 200	
	Cell size	0.73 mm to 30 mm	
	Velocity range	[-4 to 4] m/s (under Nyquist condition)	
	Velocity accuracy	0.2 to 1%	
	Velocity resolution	15 ppm of the velocity range	
	Sampling rates	Up to 15 Hz (see <u>FAQ</u> )	
	Signal processing	Coherent Doppler with phase coding	
	Number of configurations	3	
	Trigger IN/OUT	Yes (lemo connector for FFA.00.250)	
	Acoustics		
	Measurement modus	Monostatic	
	Number of transducer connectors	2 for transducers in emission/reception	
	Type of transducer connectors	Lemo for FFA.00.250	
	Frequency range	0.025 to 3.6 MHz	
	Beam width	2° to 5° half angle (depending on the transducer and on the emitting frequency)	
	Emission voltage	50V typical	
	Physical		
	Dimensions	28 x 58 x 210 mm³	





Input

Consumption

Weight	0.2 kg
Cable	Wireless
Data Management	
Communication	Wifi
Internal data logger	Up to 1.2 Go
File format	Binary data file (.udt)
Velocity	Velocity profile data (relative to acoustic beam directions) per beam and cell
Echo	Backscattered echo RMS amplitude per beam and cell
Data Quality	Velocity data quality indicator per beam and cell
Power	

Typical: 2.5 W max: 7.5 W during charge Autonomy: 4h30