

UB-Lab “Starter kit”

the beginner’s UVP / HR-ADCP

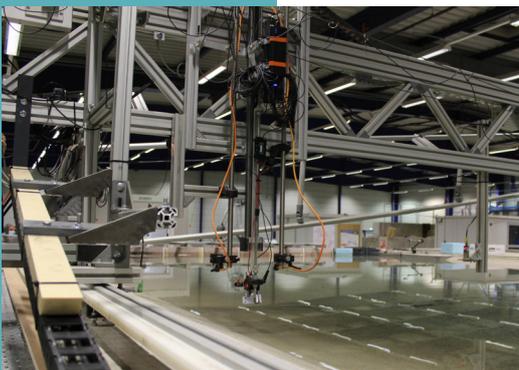
Velocity and Echo Profiles
for Laboratory Setups and Industrial Pipes

Features



- Velocity and backscattered intensity profile measurement by **high accurate** pulsed coherent Doppler (UVP)
 - **Compact** and **splash-proof** enclosure adapted to harsh environments
 - **Wifi** connection
 - Ergonomic embedded **web interface** for setting up, observing **real-time** data and recording
 - High **quality** measurements
 - High spatial and time resolution
- **Upgradable** to full UB-Lab S4

Applications



- **Laboratory** studies
- **Education**
- **Physical model** studies
- Turbine and marine current turbine calibration
- **Complex fluids** studies
- CFD input and validation
- Industrial process optimization
- **Food engineering** process control
- Reactor monitoring

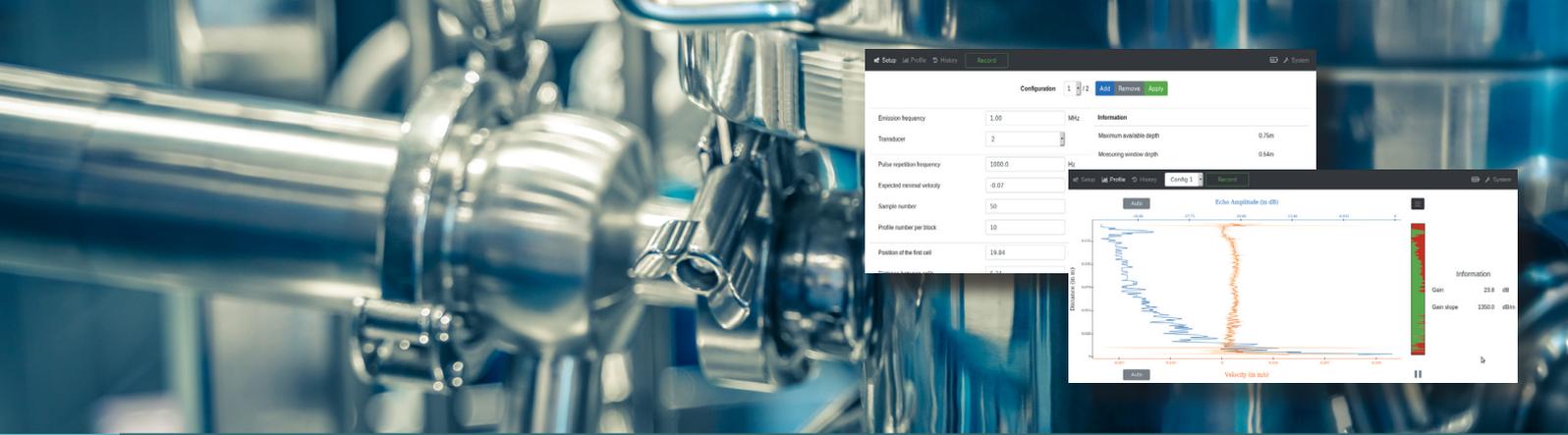
Our devices are available for rent, for lease and for sale.

Contact



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Technical specifications

Measurement Performances

Sampling range	0.005 to 2 m
Number of cells	2 to 30 ("Starter kit" specific)
Cell size	0.73 mm to 30 mm
Velocity range	[-2 to 2] 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 FAQ)
Signal processing	Coherent Doppler with phase coding
Number of configurations	2 in "Starter kit 2C" or 4 in "Starter kit 3C"
Trigger IN/OUT	Yes (lemo connector for FFA.00.250)

Acoustics

Measurement modus	Monostatic
Number of transducer connectors	4 for transducers in emission/reception, only 2 active in "Starter kit 2C"
Type of transducer connectors	Lemo for FFA.00.250
Frequency range	3 MHz ("Starter kit" specific)
Beam width	2° to 5° half angle (depending on the transducer and on the emitting frequency)
Emission voltage	50V typical

Physical

Dimensions	174 x 116 x 56 mm ³
Weight	0.8 kg

Data Management

Communication	HTTP through Wi-Fi 802.11g (Ethernet optional via USB)
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

Input	USB 5 V ; 1.5 A
Consumption	Typical : 3.5 W ; Maximum : 7.5 W
ON/OFF	Button with LED indicator

