

VLI : Digital area velocity sensor

VLI Smart area velocity sensor

VLI is designed to optimize the overall performances of height / velocity measurements when pairing to the autonomous IJINUS solutions. We have also added GSM / GPRS communication.

Ultra compact and good autonomy

Versatile with various connection options, you can directly power the sensor with a classic Modbus logger for a measurement campaigns of short duration, or connected to a battery pack for more than a year of autonomy.

Quality and accuracy of the height measurement

Equipped with a flat digital pressure sensor, it provides a measure of height from 2 mm of water. Compensated in temperature and pressure it allows a level calibration according to the atmospheric pressure, and avoiding potential measurement drift. It is also really fast to install.

Unique performance for a velocity sensor

Velocity measurement **from 25 mm of water.**

From its unique digital technology, it is possible on storm overflow applications, to use an overflow detector to seek only a height measurement to verify the pertinence of launching a longer velocity measurement that require more energy.



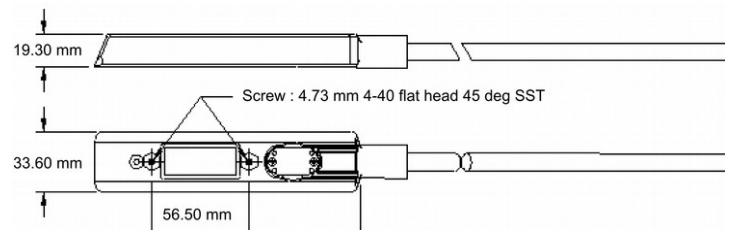
High-level expertise of the velocity measurement quality

With three quality indicators for measuring velocity it is possible to know :

- Necessary signal strength to a velocity measurement (clear water or containing a high numbers of particles)
- Discrimination of the velocity spectrum received (difficulty to measure the velocity)
- The quality of the measured flow (laminar flow or not)

All these indicators to validate or not the quality of the measurement and the conditions inherent in this measure.

VLI sensor	
Size :	H 1,9 cm x 3,3 cm x 15,2 cm
Weight with cable (10 m)	1,68 Kg
Available cable length	- 10 m - 23 m
Power supply	7 to 14 V consommation of 100 mA for 12V
Operating temperature Stocking temperature	0 to 70°C -40 to 70°C
Measurement range	Velocity : -1,5 à 6,1 m/s bidirectionnal height: 0,001 à 3,05 m
Velocity accuracy	+/- 0,03 m/s de -1,5 m/s à 1,5 m/s +/- 2% au delà
Height accuracy	+/- 0,10% of full scale from 0°C to 70°C
Minimum height for a velocity measurement	25 mm
Maximum height	10,5 m
Height Stability	± 0,007 m/an
Housing	Epoxy/PVC
Technology	Velocity: Continious wave doppler 500KHz Height: differential pressure transducer
Measuring angle	20° / Horizontal
Measuring cycle	Adjustable and possibility to set a limit at 30 secondes



Specifications	
Dimension with data logger	Velocity : -1,5 to 6,1 m/s bidirectionnal height: 0,001 up to 3,05 m
Weight	8,75kg
Autonomy	10 month without overflow, 1 month on overflow (lead external battery) 2 months autonomy with a log every 2 minutes and a measure cycle every 30s
Battery type	Lead battery 21 Ah

