



## VLI : Capteur Hauteur / Vitesse numérique

### Smart 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 battery life

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

### 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.

### 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 number particles)
- Discrimination of the velocity spectrum received
- The quality of the measured flow (laminar flow or not)

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





## VLI SENSOR

Size	H = 1.9 cm , l = 3.3 cm, Length = 15.2 cm	Housing	Epoxy/PVC
Weight with cable (10 m)	1,68 Kg	Technology	Velocity: Continuous wave doppler 500KHz Height: differential pressure transducer
Available cable length	<ul style="list-style-type: none"><li>• 10 m</li><li>• 23 m</li></ul>	Measurement angle	20° / Horizontal
Power supply required	7 to 14 V - Consommation : 100 mA for 12 V	Measurement cycle	Adjustable and possibility to set a limit at 30 secondes
Temperature : <ul style="list-style-type: none"><li>• Operating</li><li>• Storage</li></ul>	<ul style="list-style-type: none"><li>• 0 to 70°C</li><li>• - 40 to 70°C</li></ul>		

## Specifications

Measurement range	Velocity : -1,5 à 6,1 m/s bidirectionnal height: 0,001 à 3,05 m
Velocity accuracy	+/- 0.03 m/s from -1.5 m/s to 1.5 m/s +/- 2% beyond that for very low speeds many factors, including flow rate, collector geometry, particle concentration, etc., can influence the results
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



## Specifications of the power case

Whole dimension	Longueur : 28 cm x Profondeur : 25 cm x Hauteur : 12 cm
Weight	8,75 kg
Battery life	10 month without overflow for 1 month with Overflow (External lead battery). 2 month battery life with a record every 2 minutes and a measuring period of 30s
Batterie type	Pb 21 A/H Other batteries available upon request

