



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"> • 10 m • 23 m 	Measurement angle	20° / Horizontal
Power supply required	7 to 14 V - Consumption : 100 mA for 12 V	Measurement cycle	Adjustable and possibility to set a limit at 30 seconds
Temperature :	<ul style="list-style-type: none"> • Operating • Storage 	• 0 to 70°C • - 40 to 70°C	

Specifications

Measurement range	Velocity : -1,5 à 6,1 m/s bidirectional 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
Battery type	Pb 21 A/H Other batteries available upon request

