



VLI : Digital area velocity sensor

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 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 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 quality of the measurement of velocity

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)

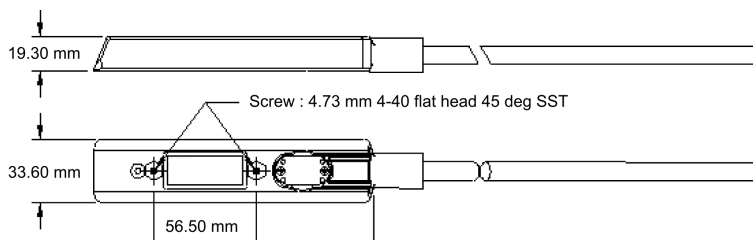
All these indicators to validate or not the quality of the measurement and the conditions inherent in this measure.



| 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 - 15 m - 23 m |
| Power supply | 7 to 14 V consommation of 100 mA for 12V |

| 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 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 |

| Specifications of the power case | |
|----------------------------------|--|
| Whole dimension | L 28 cm x P25 cm x H 12 cm |
| Weight | 8,75kg |
| Autonomy | 10 month without overflow for 1 month with Overflow (External lead battery). 2 month autonomy with a record every 2 minutes and a measuring period of 30s |
| Battery type | Pb 21A/H Other type of battery available on demand |



| | |
|-----------------|--|
| Housing | Epoxy/PVC |
| Technology | Velocity: Continuous wave doppler 500KHz Height: differential pressure transducer |
| Measuring angle | 20° / Horizontal |
| Measuring cycle | Adjustable and possibility to set a limit at 30 secondes |

