

Advantages of the FSI Tide System

Why choose a non-vented system?

- Non-vented pressure sensor (FSI)
 - Low maintenance
 - Uses barometric sensor at surface (in surface enclosure) to provide accurate water level readings
- Vented pressure sensor
 - Requires maintenance to keep vent tube clear - i.e., replace desiccant, check for kinks in cable or obstructions that will affect barometric pressure readings.

Why choose a pressure-based system over an acoustic system?

- Pressure Advantages
 - Easy to install and maintain
 - Typically lower-cost
 - Protected from vandalism
- Acoustic Advantages
 - Accessible for maintenance
 - No recalibration required
 - Installation above water protects from debris and fouling
- Pressure Disadvantages
 - Will eventually need recalibration (but pressure calibration is not difficult or costly)
- Acoustic Disadvantages
 - Temperature variation through air column affects accuracy. Measuring temperature near the sensor can help but does not reflect the temperature throughout the air column.
 - Readings can be affected by wave action/debris/high sediment content
 - Operation may be affected by condensation, freezing or other build-up on sensor
 - Accessible to vandals