

## Explorer DVL Brings 12 Unique Advantages for Littoral Vehicles

1. **Significantly Lower Weight.** For those applications that demand a light weight alternative, the Explorer is the ideal tool weighing in at approximately 2.5 Kg.
2. **Significantly Reduced Size.** Explorer's electronics measure less than 8.5" x 3.5" and the transducer is approximately the same diameter as a standard CD.
3. **Remote Transducer Design.** This convenient feature allows for more versatility in system integration and is provided complete with the required electronics & cables to connect the remote head.
4. **More Flexible Triggering.** Includes a programmable delay to start pinging after a trigger has been received and a programmable trigger time-out which allows continued pinging even if a trigger is never received.
5. **Improved Bottom Ranges.** The altitude measurements made by the Explorer now take into account the pitch and roll of the instrument as well as the slope of the bottom.
6. **More Flexible Coordinate Transformations.** Users can now correct for misalignment between instrument and ship coordinates along all three axes instead of just one.
7. **Higher Resolution.** The Explorer reports velocities to a resolution of 0.01 mm/s and distances to a resolution of 0.01 mm.
8. **Increased I/O Capability with Flexible Architecture.** Explorer has a dedicated communication module which can be upgraded over time with newer technologies.
9. **Lower Power.** With a quiescent power draw of a Watt and a typical average operational power draw of 1.25W at 12VDC (2W@24VDC), the Explorer consumes significantly less power.
10. **Future Compatibility with Phased Array Technology.** Explorer has been designed to operate with all TRDI transducer technologies. The Explorer is interchangeable with our Phased Array Technology which, upon introduction, will offer many additional benefits such as extended range, lower flow disturbance and speed of sound independence.
11. **Higher Ping Rates.** The Explorer has a higher maximum ping rate of 11 Hz translating to increased velocity updates.
12. **Improved Sensor Interfaces Including:**
  - ✍ The ability to pass the raw external sensor data through to the user.
  - ✍ The ability to allow the user to adjust the sensor setup and sampling by storing sensor commands within the Explorer.
  - ✍ The ability to allow the user to communicate to the external sensor suite through the built-in communication terminal for troubleshooting purposes.
  - ✍ Automated logic allowing the use of best available parameters for Doppler velocity processing based on connected sensor inputs.