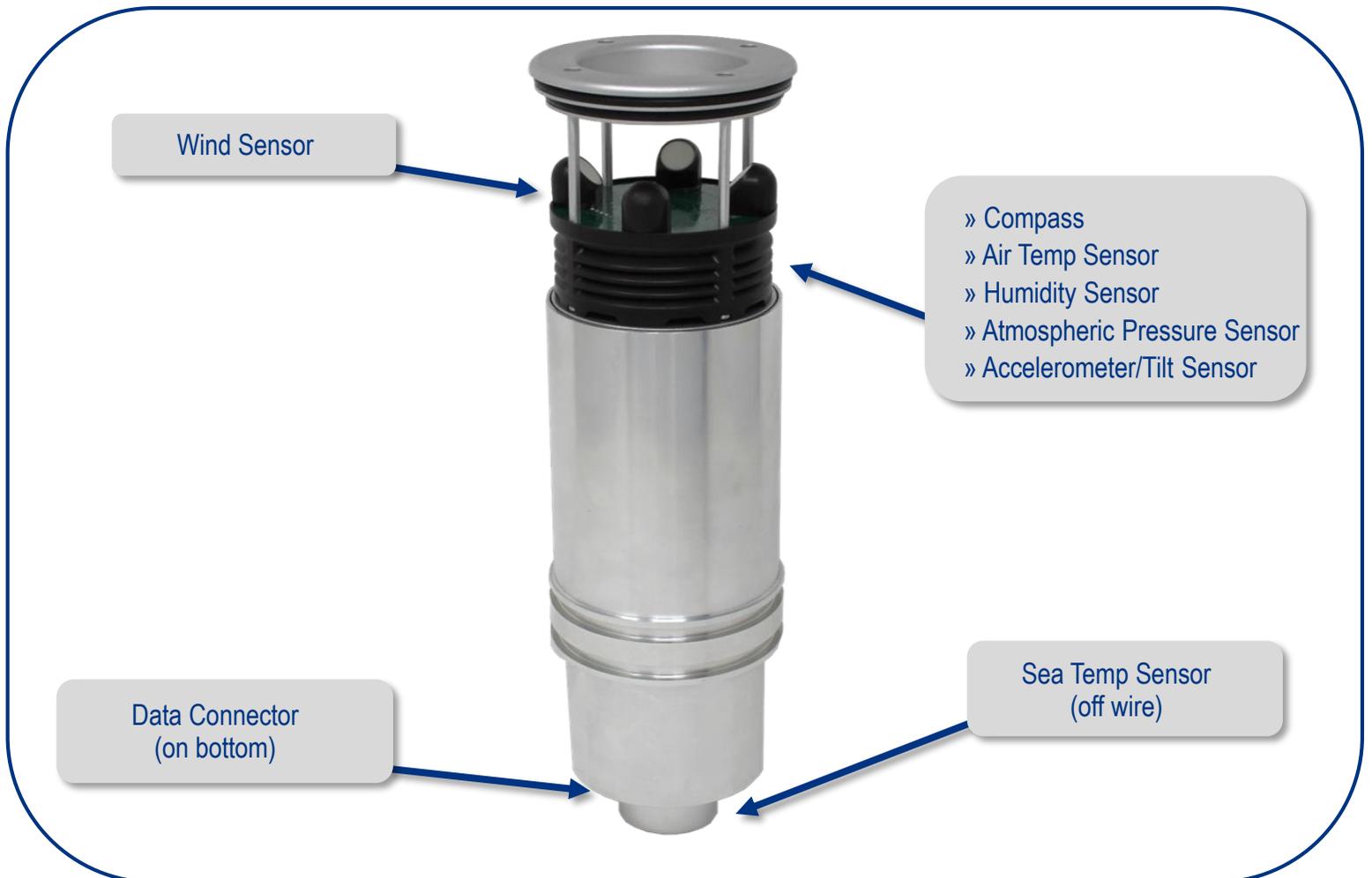


SDWS

Maritime Deployable Weather Sensor

ISI's **Submarine-Deployable Weather Sensor (SDWS)** is a versatile and rugged maritime sensor system which integrates ISI's miniature weather sensor electronics with proven, low-cost deployable buoy systems to provide Sea and Air Temperature, Humidity, Barometric Pressure, Wind Velocity and Direction, and Sea State. The system is deployed using a submarine's standard 3" launcher and can communicate real-time data back to the submarine via tether or to a remote command center with optional wireless or satellite communications methods. All SDWS sensors are integrated and packaged to survive the harsh ocean environment, including the extreme pressures experience at launch depth.





Advantages

- » Leverages ISI's rugged and ultra-compact Micro Weather Sensor™ technology which has been fielded by military forces all over the world.
- » Direct wired connection to the submarine allows for real-time monitoring on demand with no waiting for drone or free-floating buoy sensors and no communication lag.
- » Tethered system enables the submerged vessel to remain at depth, greatly reducing the risk of detection.
- » Proven low-cost sensors and manufacturing methods enable a low-cost, expendable sensor solution.
- » Uses standard buoy launching systems eliminating need for costly infrastructure changes to the submarine or significant deviation from operational procedures.



Functionality

The buoy is ejected from the existing launch tube (a) of a submerged submarine (b) and the buoy rapidly floats to the surface as the communications tether uncoils. The buoy sensor compartment remains closed during ascent (c) and opens automatically, deploying a float upon reaching the surface (d) to allow for real-time weather measurements above the water surface.

