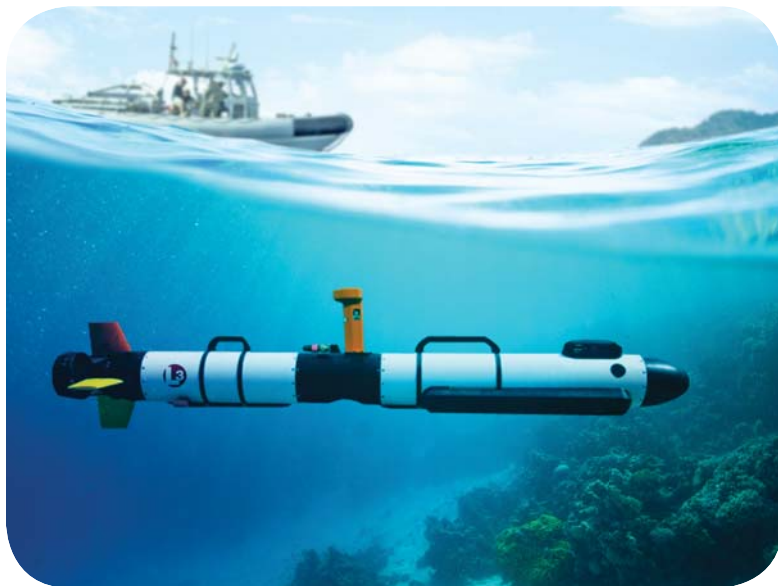# Affordable Work Class Autonomous Underwater Vehicle (AUV)
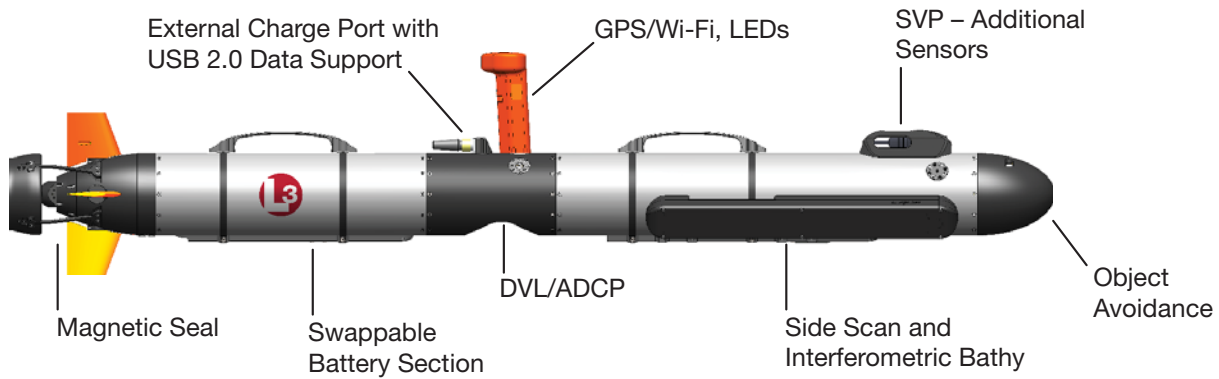
Iver is the first commercially developed family of low-cost Autonomous Underwater Vehicles (AUVs). They are ideal for coastal applications such as sensor development, general survey work, sub-surface security, research and environmental monitoring. These modern AUVs are single man-portable and feature simple point-and-click mission planning.

KEY BENEFITS

- State-of-the-art open system
- Reliable, efficient, simple to operate
- Launch and operate from shore, single person operation
- Affordable systems
- Mission planning in minutes, field rugged, compact design

Extended Operation Time. Wide Variety of High-Resolution Sonar Options. Intuitive Mission Planner.

STANDARD FEATURES	
Dimensions	Standard Length: 60 to 85 in.
Tube diameter	5.8 in.
Weight	59 to 85 lb. (standard vehicle)
Depth rating	100 meters
Endurance	8 to 14 hrs. at speed of 2.5 knots; configuration dependent
Speed range	1 to 4 knots (0.5 to 2.0 m/s)
Communications	Wireless 802.11n Ethernet standard (Iridium and Acomms optional)
Antenna mast	Navigation lights with IR and visible LEDs (programmable strobe)
Tracking internal data log	Programmable resolution
Navigation	**Surface:** GPS (WAAS corrected) **Subsurface:** RDI Doppler Velocity Log (DVL), 81 m range, depth sensor and corrected compass
Software	**Vector Map:** Mission planning and data viewing **Sonarmosaic:** Creates GeoTIFF images of side-scan records and KMZ files for Google Earth™ **Bathymosaic:** Creates GeoTIFF images for bathymetry data **Underwater Vehicle Console (UVC):** Operation, run mission, remote control
Energy	800 W hrs. of rechargeable Lithium-Ion batteries (Swappable section)
Onboard electronics	Intel® Dual-Core 1.6 GHz N2600 processor with MS Windows® embedded; Up to 512 GB solid-state drive for data storage
Propulsion system	48 V Servo Controlled DC Motor with three-blade cast bronze propeller
Control	Four independent control planes (Pitch/Yaw Fins)
Charging	24 V External Connector with USB 2.0 Support

External Charge Port with USB 2.0 Data Support

GPS/Wi-Fi, LEDs

SVP – Additional Sensors

Magnetic Seal

Swappable Battery Section

DVL/ADCP

Side Scan and Interferometric Bathy

Object Avoidance

OPTIONAL SENSORS & ACCESSORIES	
Sonar side scan	**Edgetech 2205:** Dual-frequency 400/900 kHz or 600/1600 kHz
	Klein UUV-3500: Dual-frequency 455/900 kHz
	Tritech Starfish: Single-frequency 450 kHz
Interferometric co-registered sonar	**Edgetech 2205B:** Swath bathymetry 600 kHz
	Klein UUV-3500B: Swath bathymetry 455 kHz
Inertial Navigation System (INS)	INS based on iXBlue PHINS Compact C3 fiber-optic gyroscope
CT sensor	Conductivity and temperature (NBOSI)
SVP sensor	Sound velocity probe (AML)
Communications	**Surface:** 2.4 GHz telemetry radio for handheld remote and/or Iridium with cloud-based tracking software
	Subsurface: Acoustic modem: (Benthos or WHOI)
Topside deck box	Surface equipment for subsurface comms with Benthos Acoustic Modem option
Handheld remote controller	Touch screen based remote with joystick for surface control (300 + meter range)
GoPro-based camera system	Still or video; includes LED lighting and processing software
Acoustic pinger	Underwater locater beacon
Rugged transit case	With custom foam inserts for Iver3, includes collapsible AUV field stand
Magnetometer	Support for towed Marine Magnetics Explorer
Field Rugged Operator Console	Getac for mission planning, operating and data viewing
GPS compass stand	High-accuracy, land-based AUV calibration tool
Object avoidance sounder	Imagenex 852 forward-looking echo sounder in AUV bow
Launch & recovery device	Capture cocoon
Other options	Iver3 spares kit, swappable battery section with tail

L3 OceanServer

275 Martine Street

Fall River, MA 02723

Tel: 508.678.0550

Email: sales@ocean-server.com

www.iver-auv.com

www.L3T.com