

IVER4 580 UNMANNED UNDERWATER VEHICLE

STANDARD CONFIGURATION

Length, Diameter and Weight

82 in. Length, 5.8 in. Diameter Carbon Fiber Tube, <100 lbs.

STANDARD FEATURES	
Depth Rating	300m rated titanium/carbon fiber pressure housing configurations
Endurance	6hr/18hr configurations
Speed Range	1-to-5 knots transit, 6 knots sprint
Communications	Wireless 802.11n, Iridium (SBD) and acoustic communications
Antenna Mast	GPS/WiFi fixed strobe antenna mast
Navigation	Surface: GPS (WAAS corrected), Subsurface: RDI DVL, INS
Software	VectorMap: Mission planning and data viewing; Sonar Mosaic: Creates GeoTIFF images of side-scan records and KMZ files for Google Earth; Underwater Vehicle Console (UVC): Operation, run mission, remote control
Energy	Sealed hot-swappable battery: 780 wh Li-Ion rechargeable battery section; Optional 15-to-18 hr long endurance
Onboard Electronics	Intel Celeron N2930 1.83GHz quad-core processor with MS windows embedded; 1 TB solid-state drive for data storage
Propulsion System	Brushless DC motor with three-blade stainless steel propeller
Control	Four independent control planes (pitch/yaw fins)
Charging	48V external connector
Side Scan Sonar	Dual frequency 1600/600 kHz or 900/600 kHz configurations
Swath Bathymetry	600 kHz Interferometric co-registered sonar
Forward Looking Echo Sounder	Imagenex 852 forward-looking echo sounder in AUV bow for object avoidance
Inertial Navigation System	INS based on iXBlue PHINS compact C3 fiber-optic gyroscope
SVP Sensor	Sound velocity probe (AML)
Doppler Velocity Log	175m bottom-lock with current profiling
Communications	Surface: 2.4 GHz telemetry radio for handheld remote and Iridium with cloud-based tracking software; Subsurface: Blueprint acoustic modem and topside deck box
Handheld Remote Control	Rugged water resistant remote with joystick for surface control (300+ meter range)
Acoustic Pinger	Externally mounted
Data Port	Gigabit ethernet
Safety Systems	Watchdog Iridium safety systems
Field Rugged Opertor Console	Getac for mission planning, operating and data viewing. Includes VectorMap mission planning software and VectorMap surface radio



The Iver4 580 offers users a 300-meter depth survey system featuring hot-swappable battery sections that can be changed in the field without any special tools.

Built with Iver4 next-generation technology, the Iver4 580 features a full suite of sensors in a portable size and small mission footprint. The combination of transportability and in-water efficiency makes the Iver4 580 the ideal vehicle for commercial and defense survey missions.

IVER4 580 UUV KEY FEATURES

- > Sealed vehicle sections that can be paired at the wet-break point with no special tools or vacuum pump required
- > Rechargeable Li-Ion battery section that is field-swappable and can be shipped as non-hazardous material
- > Full sensor suite in forward-sealed section including side scan sonar, inertial navigation system, sound velocity probe and doppler velocity log
- > Durable titanium and carbon fiber construction
- > High-speed data download with GigE speed
- > Unmatched shallow water and surf zone performance with sophisticated shore avoidance autonomy and robust navigation architecture
- Years of sensor integration experience on the Iver platform produce the highest position accuracy available with leading inertial and acoustic navigation sensors



AVAILABLE OPTIONS

- > Training at L3Harris in San Diego, California
- > Towed Marine Magnetics magnetometer
- > Iver4 spares kit
- > Custom payloads and open system models

Iver4 580 UUV Spec Sheet

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