Autonomous Underwater Vehicle with unmatched capability!

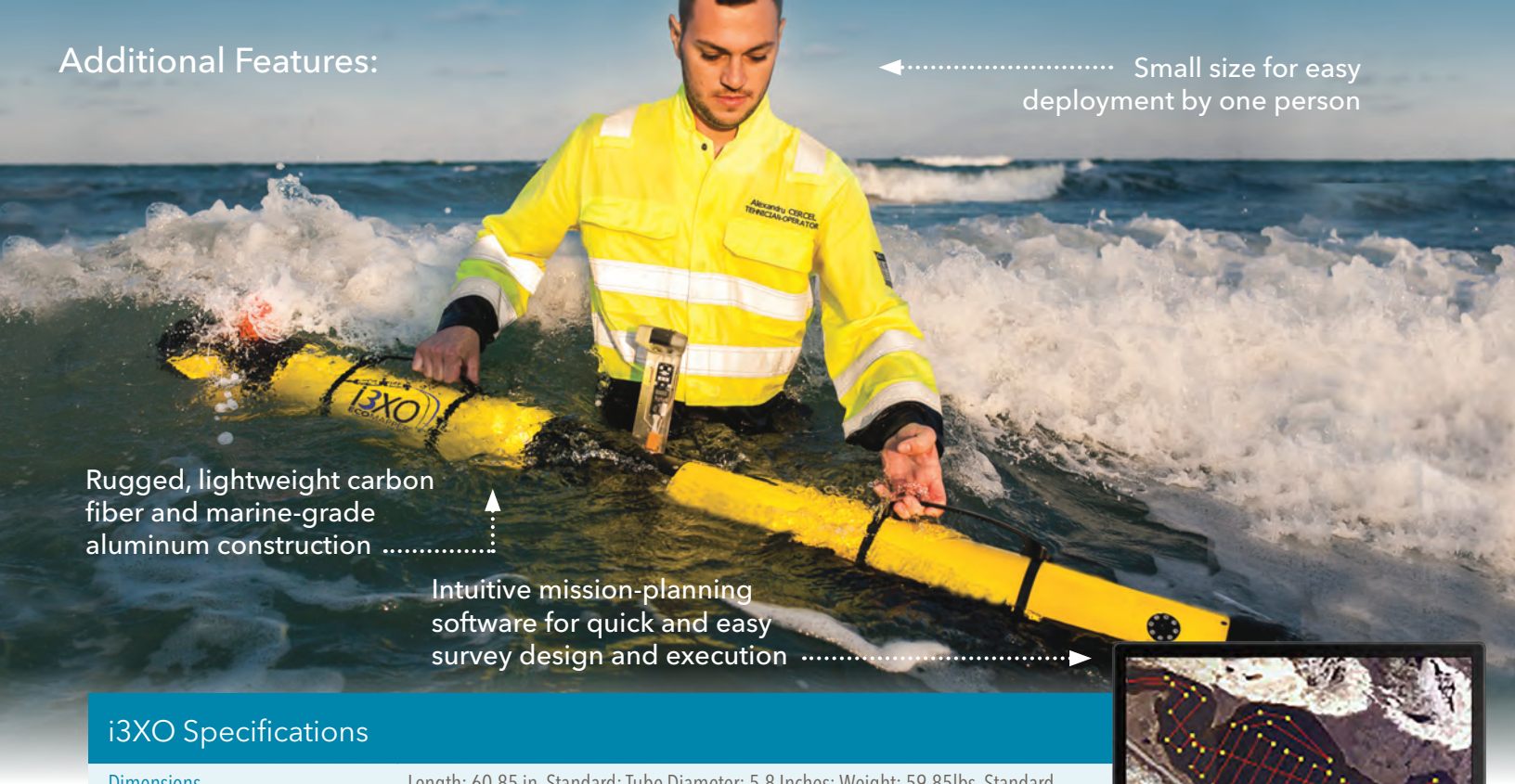
The **i3XO EcoMapper™** is an Autonomous Underwater Vehicle (AUV) data collection platform, unmatched in its flexibility and capability. Its intuitive design allows you to generate high-resolution maps of water quality, water currents, bathymetry, and sonar imagery without a workboat or associated staff. YSI EXO sensors measure at a continuous interval for missions ranging from 8-12 hours long. Once deployed, the EcoMapper communicates while on the surface and acquires a GPS fix at waypoints identified in the mission plan.

But that's just the beginning of the i3XO EcoMapper capabilities:

- Built-in moisture detectors with fail-safe emergency buoyancy system for asset recovery
- Li-Ion batteries allow long run-time and quick recharge
- Undulation through the water column provides data in both the horizontal and vertical planes
- Bow with integrated sensor package includes YSI's water quality sensor bulkhead, and depth sounder
- Near-coastal operating depth – bays, rivers, lakes (to 328 ft depth)
- Options to measure up to 8 water quality parameters, bottom mapping, and water profiling

YSI.com/ecomapper

SPECIFICATIONS #E50 Rev. A



i3XO Specifications

Dimensions	Length: 60-85 in, Standard; Tube Diameter: 5.8 Inches; Weight: 59-85lbs, Standard
Depth Rating	100m (328 ft)
Endurance	8-14 hours at 2.5 knot speed; configuration dependent
Speed Range	1-4 knots (0.5-2.0 m/s)
Communication	Wireless 802.11g Ethernet standard (Iridium optional)
Antenna Mast	Navigation Lights, with IR and Visible LEDs (programmable strobe)
Tracking Internal Data Log; Software	Programmable Resolution
Navigation	Surface: GPS (WAAS corrected). Subsurface: RDI Doppler Velocity Log(DVL), 81M range, depth sensor and corrected compass
Software	Vector Map: Mission Planning and Data Viewing Sonar Mosaic: Processes sonar records for overlay to Vector Map Bathymosaic: Creates GeoTiff images of a side scan records and KMZ files for Google Earth Underwater Vehicle Console (uvc) : Operation, run, mission, remote control
Energy	800 WHrs 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	48V Servo Controlled DC Motor with 3-blade cast bronze propeller
Control	Four independent control planes (Pitch/ Yaw Fins)
Charging	24V External Connector with USB 2.0 supports
Sonar Side Scan	Tritech Starfish. Single frequency 450kHz
Communications	Surface: 2.4 GHz telemetry radio for Handheld Remote; and/or Iridium with cloud based tracking software
Handheld Remote Controller	Touch screen based remote with joystick for surface control (300 meter + range)
Acoustic Pinger	Underwater locator beacon
Rugged Transit Case	With custom foam inserts for Iver3, includes collapsible AUV field stand
Field Rugged Operator Console	Getac for mission planning, operating and data viewing
GPS Compass Stand	High accuracy, land based AUV calibration tool
Object Advance Sounder	Imagenex 852 forward looking echo sounder in AUV bow
Other Options	Iver3 Spares Kit, Swappable Battery Section w/ tail

YSI
a xylem brand

YSI Incorporated
1725 Brannum Lane
Yellow Springs, OH 45387

1.727.565.2201
ysi.systems@xyleminc.com
YSI.com/ecomapper

YSI.com/ecomapper