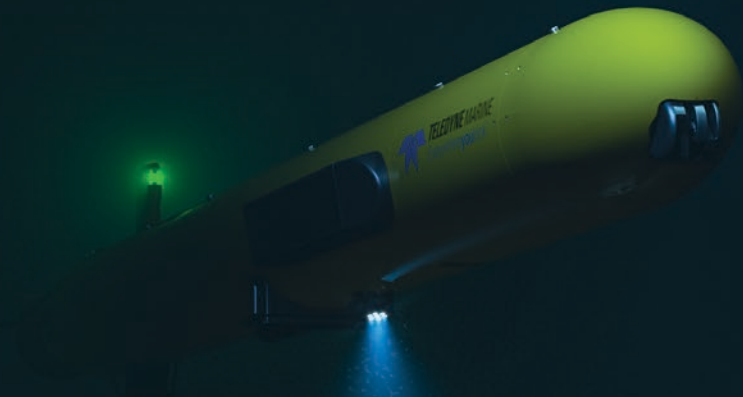




TELEDYNE MARINE
Everywhere you look™



VEHICLE BROCHURE

Our Vision

The art of modern warfare has changed. The pace of technology is reshaping ways battles are fought and won. At Teledyne Marine, we’re focused on providing technologies which provide both the access, and the information, needed for this new paradigm. Our systems use the latest developments in maritime hardware and software to provide the most accurate and timely information allowing the warfighter to conduct operations with confidence.

Our use of Autonomy, Machine Learning, and Artificial Intelligence allows for covert and precise operations in challenging environments, reduction of errors, reduction of risk, and reduction of operational complexity and expense. Our systems cover surface to sea floor and provide capabilities in the areas of Rapid Environmental Assessment (REA), Intelligence Surveillance and Reconnaissance (ISR), Anti-Submarine Warfare (ASW), Subsea and Seabed Warfare (SSW), Mine Countermeasures (MCM), Critical Undersea Infrastructure monitoring (CUI), and more.

We’re ready to work with you to accomplish

Your Vision.

Teledyne Marine

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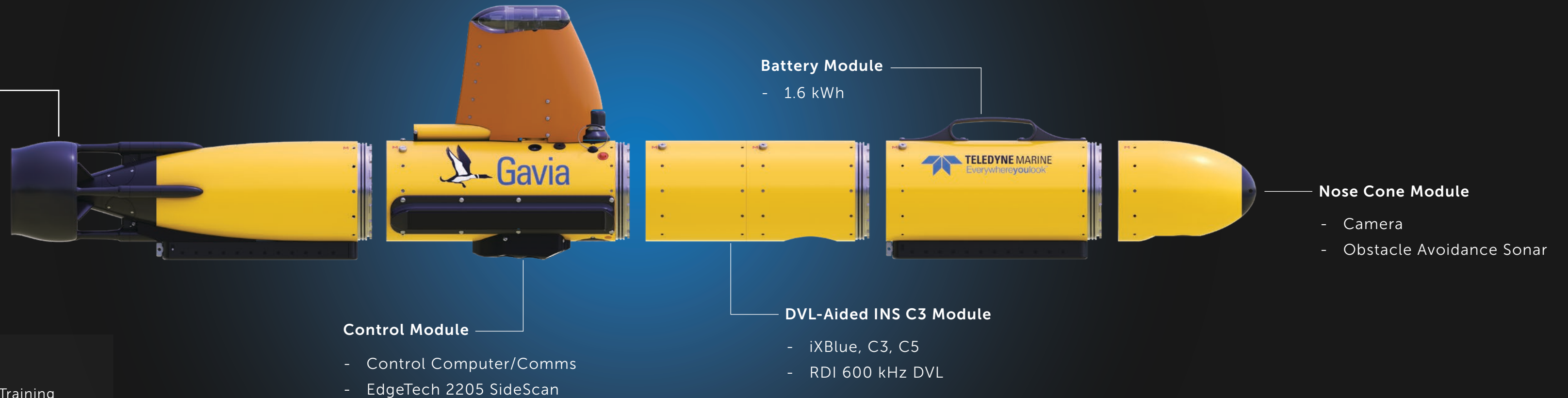
GAVIA

Specifications

Size (Diameter): 200 mm
Depth Rating: 1000 m
Speed: 3.5 kt survey, > 5.5 kt sprint
Endurance: 7-14 hrs

Applications

MCM - Mine Countermeasures
ASW - Anti-Submarine Warfare & Sonar Training
REA - Rapid Environmental Assessment
SAR - Search & Recovery
SSW - Subsea & Seabed Warfare
SF&EM - Special Forces & Expeditionary Missions



The Gavia is our lightweight, fully modular, multi-mission, low logistics AUV. With sensor options including SAS, MBES, SSS, SBP along with custom payloads, and autonomy options combined with sales to 16 NATO and NATO aligned naval users the Gavia has unrivaled mission versatility.

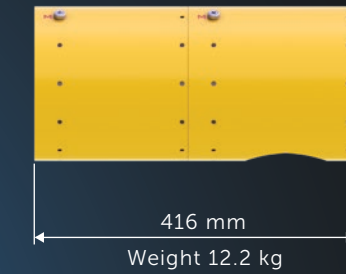
GAVIA MODULES



Propulsion & Actuator Module



**Control & Communications Module
with EdgeTech 2205 SSS**



DVL-Aided INS Module



Battery Module



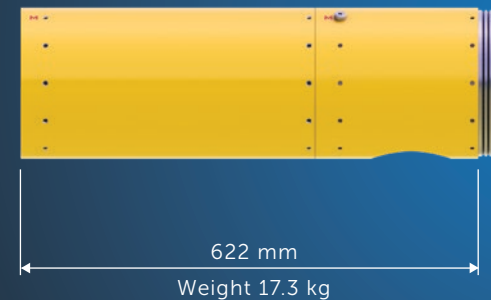
Nosecone Module



EdgeTech Bathy Module



BlueView Module



DVL-Aided INS C5 Module



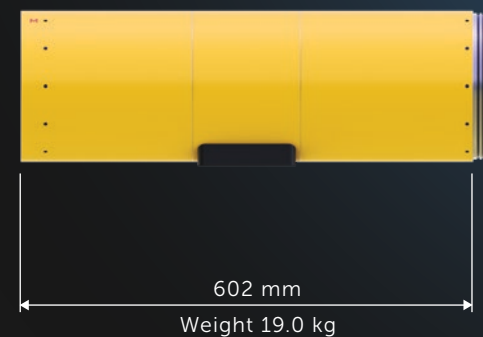
Reson SeaBat T20 Module



MINSAS60 Module



Recovery Nosecone Module



Sub-bottom Profiler Module



Science Bay Module



Lower Frequency Sonar Training Module

OSPREY

Specifications

Size (Diameter): 324 mm
Depth Rating: 2000 m
Speed: 3 kt survey, > 5 kt sprint
Endurance: 24-48 hrs

Propulsion Module

Battery Module

- 4.4 kWh

SAS Module

- Synthetic Aperture Sonar

Nose Module

- BlueView M900

Control Module

- Conning Tower
- C7 INS
- 300 kHz Pathfinder

T20 Multibeam Module

- TC2181 Projector
- EM7219 Receiver

Battery Module

- 4.4 kWh

Applications

MCM - Mine Countermeasures

ASW - Anti-Submarine Warfare & Sonar Training

SAR - Search & Recovery

SSW - Subsea & Seabed Warfare

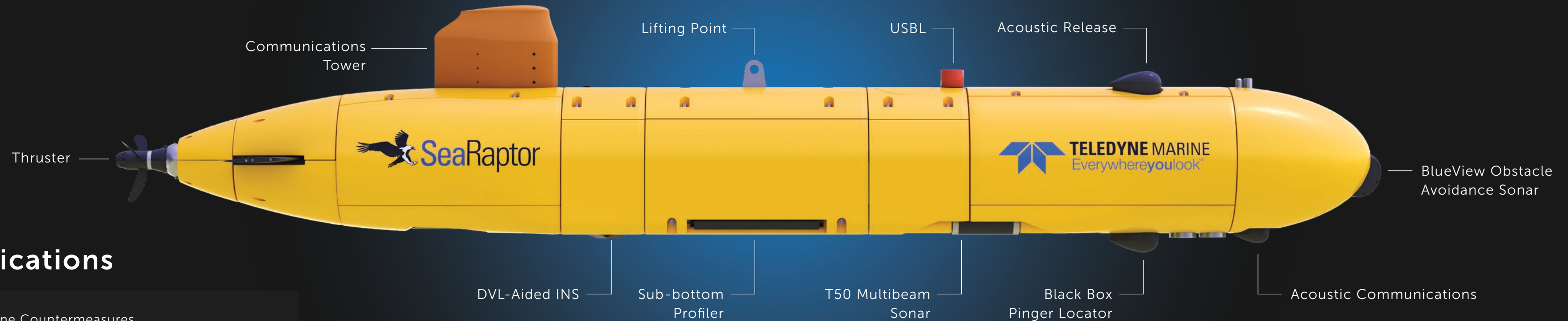
CUI - Critical Undersea Infrastructure

Our 12 ¾" medium sized AUV, the Osprey, is perfect for deeper, longer endurance work with more capable sensors and payloads. The Osprey maintains the same electronics, controls, and fully modular design as our smaller Gavia but packs in more capability for every type of mission. The Osprey is perfectly suited for military missions and can be launched and recovered from a variety of military platforms.

SEARAPTOR

Specifications

Size (Diameter): 630 mm
Depth Rating: 6000 m
Speed: 3 kt survey, 4 kt sprint
Endurance: Up to 96 hrs



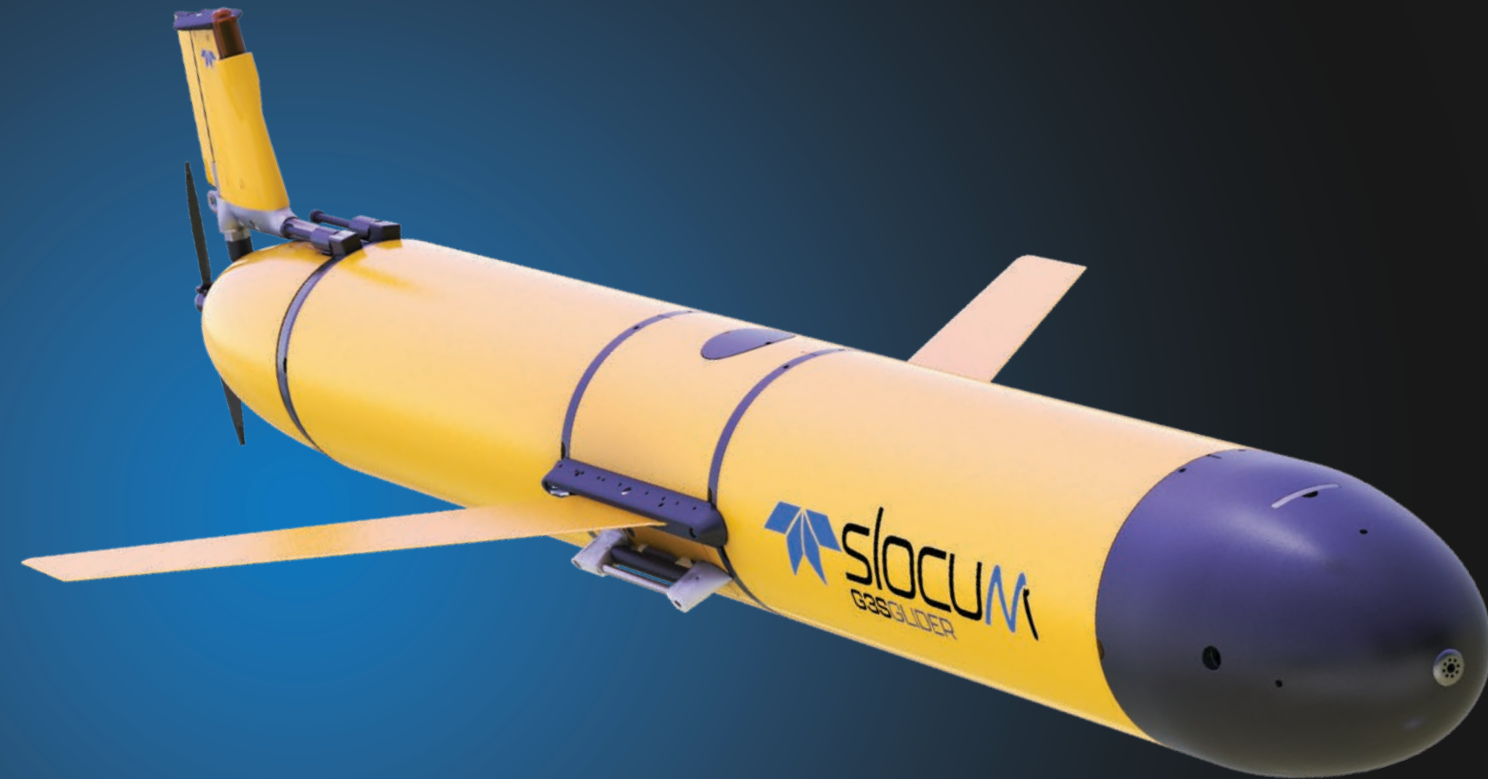
Applications

MCM - Mine Countermeasures
ASW - Anti-Submarine Warfare & Sonar Training
SAR - Search & Recovery
SSW - Subsea & Seabed Warfare
ISR - Intelligence, Surveillance & Reconnaissance
CUI - Critical Undersea Infrastructure

The SeaRaptor is a survey grade deep water autonomous underwater vehicle (AUV) with a large payload capacity and many options for customization. Designed to operate at abyssal depths, the SeaRaptor hosts a wide range of sensors which allow it to complete several types of missions including: broad area search with side-scan sonar, hydrographic survey with multibeam and sub-bottom profiler, and high resolution inspection survey with camera and synthetic aperture sonar.

SLOCUM G3

The Slocum G3 Glider provides extreme long duration operation for rapid environmental assessment. With over 60 integrated sensors and 1200 vehicles deployed, the Slocum Glider is the world's most prolific Autonomous Underwater Vehicle.



Applications

PMS - Persistent Maritime Surveillance

ASW - Anti-Submarine Warfare

REA - Rapid Environmental Assessment

ISR - Intelligence, Surveillance & Reconnaissance



Specifications

Size (Diameter): 200 mm

Depth Rating: 1000 m

Speed: 0.25 kt survey, 0.5 kt sprint

Endurance: > 400 days

Applications

PMS - Persistent Maritime Surveillance

ASW - Anti-Submarine Warfare

REA - Rapid Environmental Assessment

ISR - Intelligence, Surveillance & Reconnaissance

CUI - Critical Undersea Infrastructure



Specifications

Size (Diameter): 320 mm

Depth Rating: 1000 m

Speed: 0.25 kt survey, 2 kt sprint

Endurance: > 800 days

SLOCUM SENTINEL

The Slocum Sentinel Glider is the next generation of autonomous ocean gliders – this ultra-long endurance uncrewed vehicle allows for over a year of persistent ocean monitoring and has the size and energy to address the widest range of military missions.



APEX

Teledyne's Advanced Profiling Explorers have provided physical oceanographic data for over 30 years. With over 10,000 floats built, and millions of oceanographic profiles, Teledyne's APEX floats provide near real-time data for inclusion into warfighter models.



APEX-S Standard Argo

Sensor(s): CTD

Depth Rating: 2000 m

Profiles: Up to 400

Duration: Up to 4 years



APEX-E Electromagnetic

Sensor(s): CTD, EM

Depth Rating: 2000 m

Profiles: Up to 200

Duration: Up to 2 years



APEX-B Bio Geo Chemical

Sensor(s): CTD, O2, Fluorine, pH, N2

Depth Rating: 2000 m

Profiles: Up to 200

Duration: Up to 3 years

Applications

ASW - Anti-Submarine Warfare

REA - Rapid Environmental Assessment

ISR - Intelligence, Surveillance & Reconnaissance



APEX-P Passive Acoustic

Sensor(s): CTD, Passive Acoustics

Depth Rating: 2000 m

Profiles: Up to 200

Duration: Up to 2 years

Z/Q 1800

Sensor(s): Single beam echosounder
 Multibeam sonar
 Camera
 LIDAR
Speed: 3 kt survey, 5 kt max
Endurance: 4 hrs



Applications

- MCM** - Mine Countermeasures
- ISR** - Intelligence, Surveillance, & Reconnaissance
- CUI** - Critical Undersea Infrastructure

USVs

Teledyne’s small remotely operated uncrewed surface vehicles are designed to provide hydrographic and bathymetric surveys of ports and harbors using our latest sensing technologies including 3D multibeam sonars. The addition of LIDAR allows above and below water surveys.

Z/Q 1250

Sensor(s): Single beam echosounder
 ADCP
Speed: 3 kt survey, 5 kt max
Endurance: 1 hr



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