



HYDRONE LITE

DEPLOYABLE DEEP WATER INTERVENTION



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Saipem's commitment to the deployment of sustainable solutions is exemplified by the Hydrone Platform, which has been developed by Sonsub, the Centre of Excellence for underwater technologies and robotics.

Sonsub field proven experience in work-class ROV and underwater drones for inspection and intervention has delivered Hydrone Lite, a configurable light work-class ROV, characterized by compact size, optimized deployability and full configurable architecture.

Hydrone Lite can provide deep water intervention and inspection capabilities, integrated withing a ISO 20' footprint launch and recovery system and tether management system (TMS).

KEY FEATURES

- Depth rating: 3,000 m
- Modularity: mission modules on specific skids
- Operating mode: ROV, with FO tether (comms only)
- Upward thrust: up to 50 kg
- Launch and recovery:
 - free-flying (from vessel crane)
 - LARS and TMS
- Single pilot command and control (for single manipulator configuration)

POWER SYSTEM

- Full electric
- Self powered by internal rechargeable batteries

AUTOMATIC FUNCTIONS

- Auto depth
- Auto-heading
- Station keeping: 4 controlled degrees of freedom (surge, sway, heave, yaw)
- ISO 20 footprint during transport, storage and operation
- Height during transport and storage (LARS folded): 1CCC
- Max height during operation (LARS extended): 6 m

CONFIGURATION AND OPTIONS

ENDURANCE

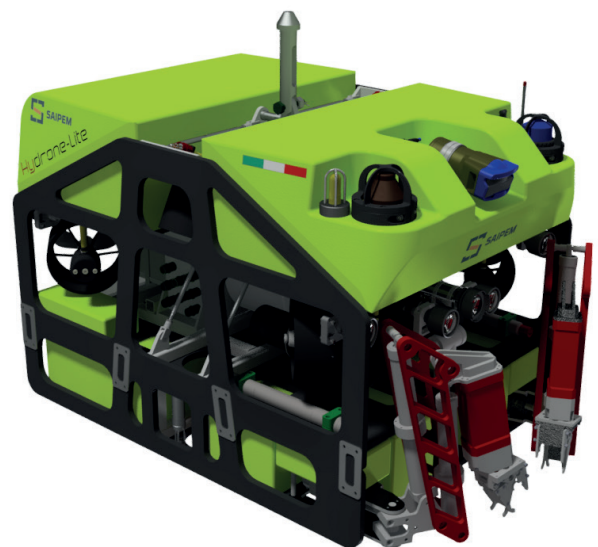
- Time endurance: >2 h

WEIGHT AND DIMENSIONS

- Weight in air: 500 kg
- Length: 1,5 m (excluding manipulator)
- Width: 1 m
- Height: 1 m

AVAILABLE CONFIGURATIONS

- **Inspection and light manipulation (base configuration):**
 - Inspection cameras
 - OAS sonar
 - Imaging sonar
 - USBL transponder
 - 1x manipulator
- **Pipe tracking:** downward looking laser scanner + still camera
- **Environmental monitoring:** hydrophone, turbidity, fluorescence, CDT, O₂, CH₄, PAH, oil-in-water, pH/Eh sensors
- **3D analysis:** forward looking laser scanner
- **Seafloor sonar mapping:** SSS, SBP, bathymetry
- **Dual manipulation:** 2x manipulators



Dual manipulators configuration