



exail

**R7 REMOTELY
OPERATED VEHICLE FOR
SUBSEA INSPECTION**

KEY CHARACTERISTICS

High stability
up to 2 knots
of currents

Specifications

Dimensions (mm)	L 780 x W 551 x H 424
Weight in air	< 35 kg
Propulsion	7 DC thrusters, 4 horizontal (vectored) / 3 vertical (for correct attitude)
Movements	In 3 axes + rotation on its own axis
Forward speed	3 knots (in 0 knot current)
Operating depth	300 m in sea water

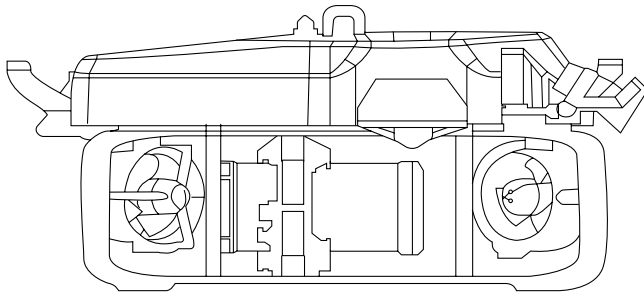
Robust and ergonomic control of the R7 ROV in severe environments

Integrating two full HD high-brightness touchscreens into a shockproof and waterproof case, the R7's control unit is quickly mobilizable.

It provides easy ROV control from the surface, delivering all operation data in real-time and at one glance:

- Inspection video
- Navigation map
- Navigation information
- Sonar and camera images

R7 configuration



- 1080p FHD inspection camera with tilt and optical zoom
- Real-time image processing camera
- Forward looking double frequency imaging sonar
- INS/DVL
- GNSS
- USBL subsea positioning system
- LEDS spotlights





An intuitive Human Machine Interface (HMI)

Operators can rely on easy and fully configurable access to all R7 ROV functions through a digital touch-screen HMI:

- Cameras
- Lighting
- Thrusters
- Real-time targets video recording and screenshots

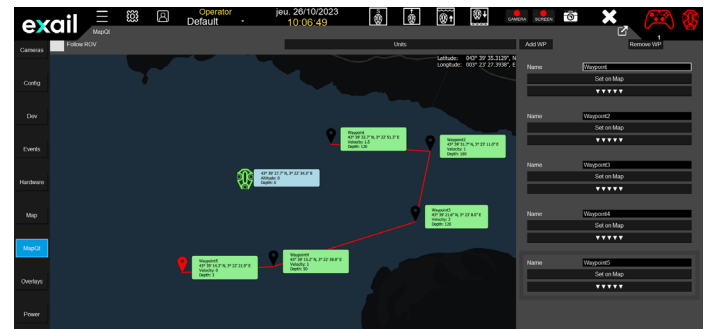
Easy operations are further enhanced via a fully configurable control joystick to meet operators' preferences. Quick status diagnosis also makes operations more efficient via real-time monitoring and data logging of all ROV functions.



Advanced navigation features for highly precise and efficient inspections

Advanced navigation functions are provided thanks to the R7's inertial navigation and positioning sensors. This results in reduced operational time and highly accurate inspections.

- **Station keeping**
Automatically holds the ROV in a fixed position for optimum inspection conditions.
- **Go to waypoint**
Autonomous ROV navigation to predefined geographical points.
- **Tracking**
Autonomous tracking of an object at a fixed distance.



WHY USE THE R7 ROV FOR SUBSEA INSPECTION OPERATIONS?

Precise navigation and maneuverability

Designed with precise thruster control and an intuitive piloting interface, the R7 ROV allows operators to navigate with exceptional accuracy and stability. Compact and lightweight, it is highly maneuverable and can efficiently navigate around complex underwater structures while carrying all necessary inspection equipment.

Modularity

The R7 is a versatile ROV that can be equipped with all necessary tools and sensors for various inspection missions, including pipeline inspection, seabed mapping, and infrastructure assessment. Its adaptable design allows for easy integration of different sensors and tools to meet specific inspection requirements.

High-resolution imaging for accurate detection

The R7 is equipped with advanced imaging systems, including high-resolution tilt cameras. This provides operational teams with clear and detailed 360° visuals of the inspected subsea assets, allowing for very effective subsea inspection operations.

Enhanced operational efficiency

Compact and light, the R7 is easily deployable from a light support vessel or RHIB. Enhancing operational efficiency, the ROV contributes to the overall cost-effectiveness of subsea inspection operations.

Minimized human risks

Remotely deploying the R7 ROV means that human divers no longer need to be sent on hazardous subsea inspection operations, prioritizing safety first.



The R7 ROV is equipped with an innovative camera that enables real-time optimization of video quality (see image on the right)