

# R7

## Compact observation class ROV

- Versatile, multi-function design
- Highly manoeuvrable
- Fully digital
- Ergonomic & intuitive user interface
- Man-portable & simple to deploy
- Professional-grade robustness
- Highly serviceable & easy to maintain



### OPERATIONAL PERFORMANCES

|                 |                                      |
|-----------------|--------------------------------------|
| Movements       | In 3 axes + rotation on its own axis |
| Forward speed   | 3 knots (In 0 knots current)         |
| Operating depth | 300m in sea water                    |
| Operating T°C   | -2 / 37°C (Water)                    |
| Storage T°C     | -10 / 50°C (Air)                     |

### VISION SYSTEM

|                                   |                                               |
|-----------------------------------|-----------------------------------------------|
| Inspection TV camera on Tilt unit | 4x Optical Zoom 1080p Full HD color TV camera |
| Lighting                          | 2 LED spotlight of 5500lm each                |

### NAVIGATION SENSORS

- Integrated Inertial Motion Unit (IMU) for ROV attitude control and automatic correction
- Heading sensor with auto heading function
- Depth sensor with auto depth function
- Altimeter with auto altitude function

### CHARACTERISTICS

Digital design allows connection with all modern payloads

|                 |                                                                              |
|-----------------|------------------------------------------------------------------------------|
| Dimensions (mm) | L 780 x W 551 x H 424                                                        |
| Weight in air   | < 35 kg w/o additional equipment                                             |
| Material        | Polypropylene frame, stainless steel fittings                                |
| Propulsion      | 7 dc thrusters 4 horizontal (vectored)/ 3 vertical (for attitude correction) |

### SURFACE COMPONENTS

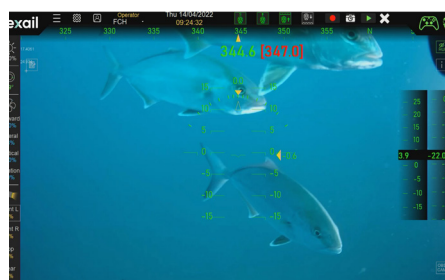
|                      |                                                                                                                                                                                                                                                                                                               |
|----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Control command unit | <ul style="list-style-type: none"><li>• Incorporated in watertight shockproof suitcase (IP65 in operation, IP67 in transport mode)</li><li>• Integrating rugged and fanless hard drive 1TB SSD</li><li>• Double 15,6" touch screen (Resolution 1920x1080 Full HD)</li><li>• Weight in air &lt; 25kg</li></ul> |
| Power Supply Unit    | <ul style="list-style-type: none"><li>• Incorporated in watertight shockproof suitcase (IP65 in operation, IP67 in transport mode)</li><li>• Power supply: 110/230VAC - 3kW</li><li>• Man portable: weight in air &lt; 35kg</li></ul>                                                                         |

### OPTIONS

- Camera Orphie Scaph for turbid water
- Navigation and imaging sonar
- 3 to 5 function electric manipulator arm
- USBL positioning system
- Doppler Velocity Log (DVL) + INS Integrated
- Up to two additional LED lights (5500lm each)
- Ultra-sensitive 1080p Full HD colour navigation camera
- Advanced navigation features (Station Keeping + mapping or mission management and patterns missions)

## HUMAN MACHINE INTERFACE

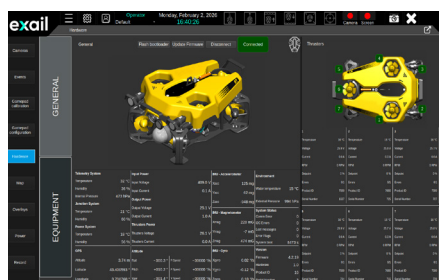
- Screen designed for sunny and harsh environments
- Software control feature (Cameras, lightings, thrusters...)
- Monitoring of all ROV's subset functions (T°, voltage, current...)
- Auto heading, auto depth, auto altitude and auto attitude corrections
- Recording of Full HD videos and snapshots on internal SSD
- Self-diagnosis of the whole system
- Head-up display of navigation parameters, amps & voltage, fault indicators
- Ergonomic joystick controller



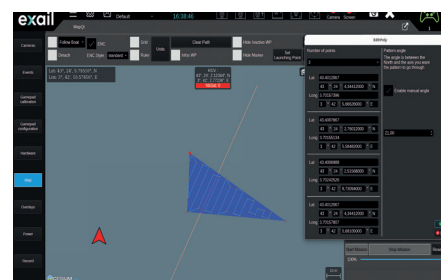
R7 - HMI navigation display

## MAINTENANCE

- Easy access to all payloads
- Payloads can be replaced with standard tools
- Quick and easy change of thrusters



R7 - HMI navigation display



R7 - Pattern mission