

# H300V

300 m observation class ROV for  
subsea operations

- Man portable, compact, powerful
- 4 horizontal vectored thrusters
- High performance viewing system
- Modular design, options simple to add
- Easy access for maintenance



VEHICLE

PERFORMANCES

- Movements: in three axis, plus rotation on its own axis
- Forward speed: 3.5 knots (in 0 knot current)
- Operating depth: 300 m in sea water
- Lifting capacity: up to 10 kg with 5 functions arm
- Payload: 8 kg with removal of whole ballast – up to 15 kg with additional buoyancy

General characteristics

- Dimensions (mm): 840 L x 530 H x 600
- Weight in air: 70 kg excluding optional equipment
- Material: polypropylene frame, SS fittings

Propulsion

- Horizontal: 4 vectored thrusters
- Vertical: 1 thruster

Telemetry unit

- Communication through RS485 data unit
- Advanced power management system
- Extra data link for sonar and NDT

Viewing & sonar system

Inspection TV camera on P&T unit

- 10x zoom colour TV camera and two LED lights mounted on Pan & Tilt unit (Pan 140°; tilt 120°)
- Laser beams for 2D measurement

Navigation TV camera

- Low light B/W on top of vehicle
- Sensitivity: 3.10<sup>-4</sup> lux

Headlights

Two fixed LED lights (4000 lm), variable intensity

Scanning / Navigation sonar

Any type, any brand

Sensors

Heading

3 axis magnetometer sensor – Precision +/- 1% Auto heading function

Depth

Piezoresistive type sensor – Precision: 0.1% – full scale – Auto depth function

Other sensors

Inside temperature – Water ingress – Amperage feedback

Optional equipment

- HD, FHD, 4K or 3D colour TV camera, rear B/W TV camera
- High resolution digital still camera with flash gun
- Obstacle avoidance and Imaging sonar
- Altimeter (with auto altitude function)
- Fiber Optical Gyrocompass
- USBL or LBL positioning system
- Xenon strobe and acoustic pinger recovery unit

Optional skids

- 5-function full electric or hydraulic manipulator arm

- Side scan sonar
- Metal Detector
- NDT skid
- Leak detection
- 3D sonar
- Sediment sampler

SURFACE CONTROL

Control unit

Incorporates a PC and a digital recorder. Racked (19”) in a shockproof case with removable front and rear covers; IP 52

- PC with 17” TFT LCD screen
- Camera parameters: video gain, electric shutter, white balance
- Auto heading and auto depth
- Recording of videos and photos on hard disk
- Self-diagnosis of whole system
- Control of lights (on/off, intensity)
- Selection of video signal from camera (inspection/navigation/still)
- Display on the screen of TV image, navigation parameters, amps & voltage, fault indicators.
- Dimensions (mm): 524 W x 499 H x 360 D
- Weight: 42 kg
- Hand box controller: joysticks for ROV movements, P/T unit and manipulator arm controls

Operating conditions

- Operating temperature: 0° to + 50°C
- Storage temperature: -10° to +60°C

- Humidity: 90%
- Power supply required: 230V AC ; 4 KVA

Umbilical cable

- Length and OD: 400 m x 19.5 mm
- Optional: 1200 m x 21 mm with fiber optic for data and video
- Buoyancy: Positively buoyant in water
- Connector: Subconn type

Winch

TMO 450: manual winch with 400 m umbilical cable capacity

ADDITIONAL CUSTOMIZED EQUIPMENT AT REQUEST

- HD or Full HD TV camera
- High resolution digital stills camera + flash unit
- Rear viewing low light B/W camera
- Sonars: Navigation – Imaging – Side scan
- Acoustic positioning system
- Altimeter echo sounder, with auto-altitude function
- NDT sensors
- Electric manipulator arms



H300V-INS  
Subsea observation,  
inspection & surveillance

- ROV highly equipped in viewing systems and sonars:
- HD TV camera
  - Digital still camera
  - Imaging sonar

H300V-OR  
Object recovery wreck  
inspection

- Single or dual electric manipulator arm for object recovery
- 3D HD TV cameras
- Rear TV camera
- Digital still camera
- USBL positioning system
- Sediment sampler

H300V-W  
Object recovery wreck  
inspection

- Single or dual electric manipulator arm for object recovery
- 3D HD TV cameras
- Rear TV camera
- Digital still camera
- USBL positioning system
- Sediment sampler

H300V-PS  
Pipe and cable survey

- HD TV cameras
- Rear TV camera
- Digital still camera
- Side scan sonar
- USBL positioning system

H300V-SUR  
Seabed survey

- Viewing systems & sonar
- Altimeter & auto-altitude function
- Side scan sonar

H300V-CBRN  
CBRN measurement

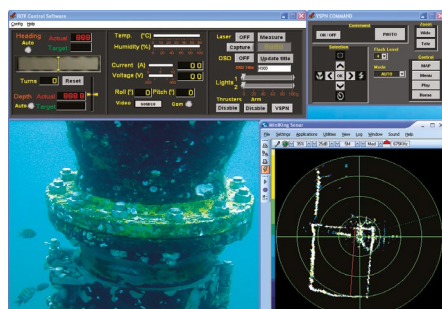
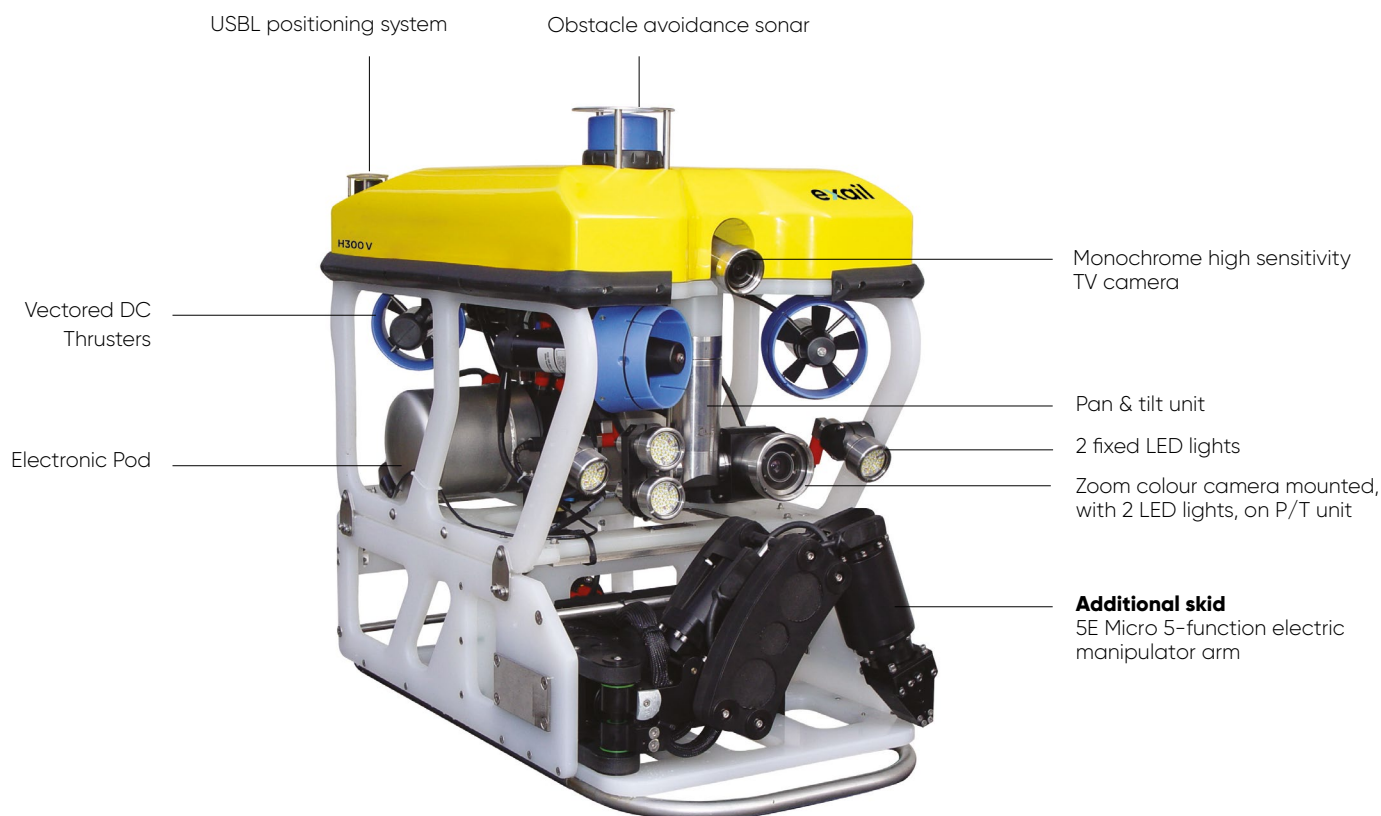
- CBRN measurement (chemical, biological, radiological and nuclear)

H300V-CT  
Cable & pipe tracking

- Pipe tracking and location system
- Altimeter and auto-altitude function
- USBL positioning

# DISCOVER H300V SKID-BASED MODULAR ARCHITECTURE

## Configure according to your needs



ROV Control software



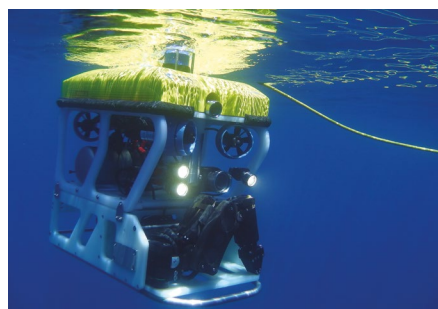
ROV control unit



ROV Control software Power supply and control system



Launch of the H300V ROV



H300 V ROV

### FRANCE & OTHER COUNTRIES

#### Exail Robotics

Z.I. Toulon Est - 262, rue des frères Lumière  
83130 La Garde - France  
+33 4 94 08 90 00 | sales.robotics@exail.com

[www.exail.com](http://www.exail.com)

### ASIA - PACIFIC

#### Exail-Group Asia Pte. Ltd

15A Changi Business Park Central 1, #04-02 Eightrium  
Singapore 486035  
+65.67.47.49.12 | sales.robotics@exail.com

**exail**