



H800

1000 M OBSERVATION CLASS ROV
FOR SUBSEA OPERATIONS

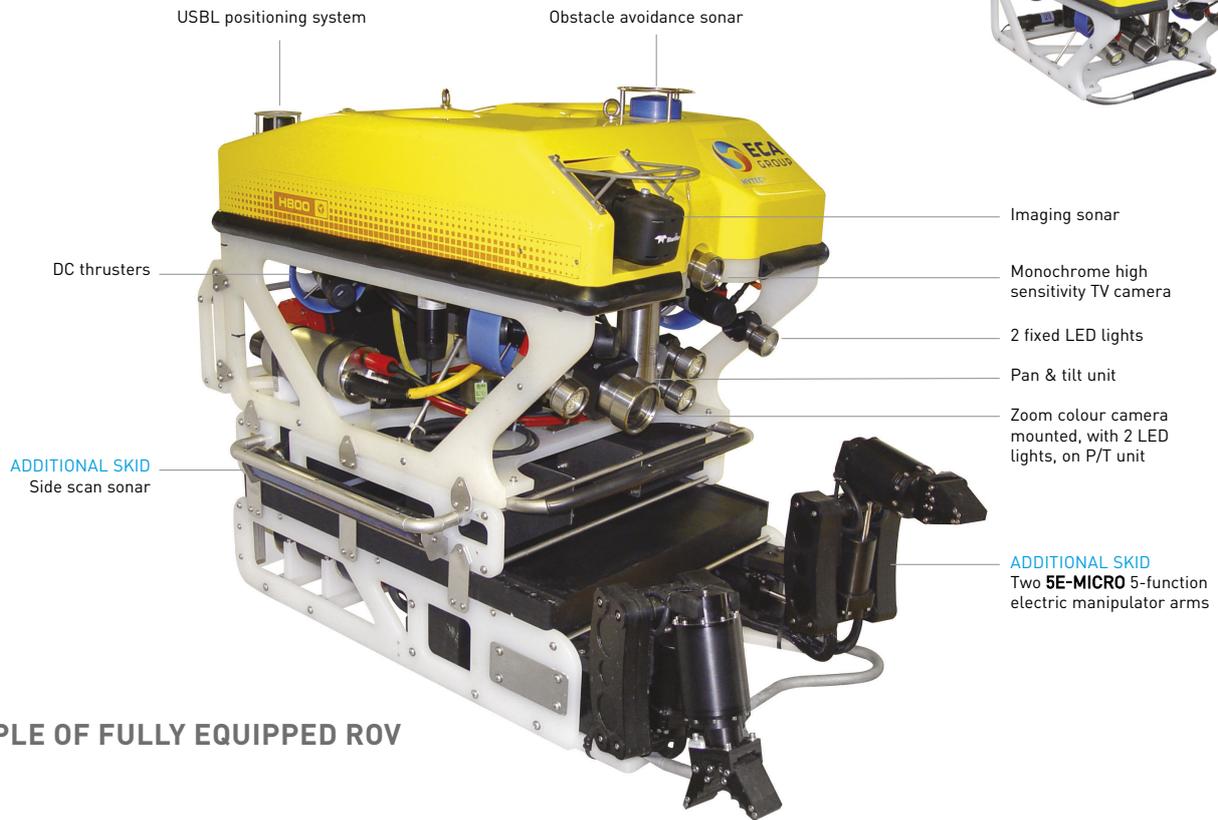
- THE MOST POWERFUL ROV OF ITS CLASS
- MAN PORTABLE
- HIGH PERFORMANCE VIEWING SYSTEM
- MODULAR DESIGN, OPTIONS SIMPLE TO ADD
- EASY ACCESS FOR MAINTENANCE



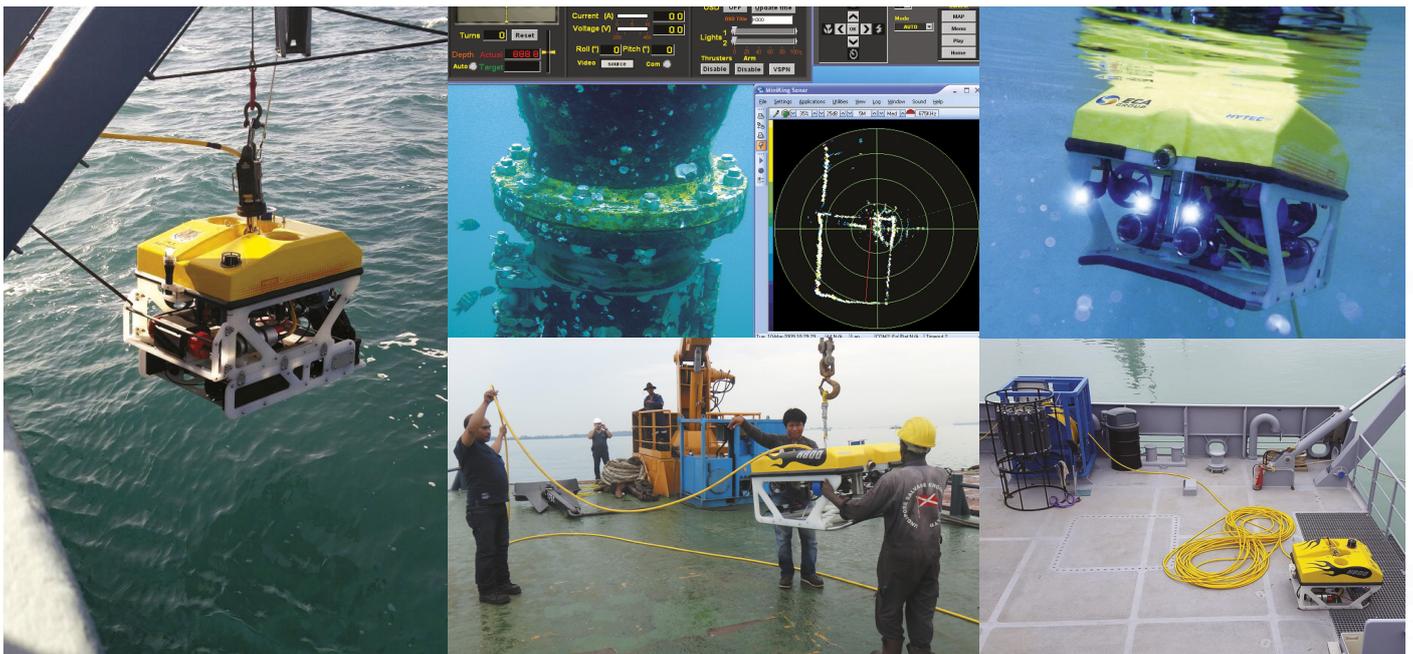
DISCOVER H800 SKID-BASED MODULAR ARCHITECTURE

CONFIGURE ACCORDING TO YOUR NEEDS

**BASIC
SYSTEM**



EXAMPLE OF FULLY EQUIPPED ROV



FOR SPECIFIC MISSIONS, CUSTOMIZE YOUR H300V WITH ADDITIONAL EQUIPMENTS:

- 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



H800-INS SUBSEA OBSERVATION, INSPECTION & SURVEILLANCE

ROV highly equipped in viewing systems and sonars:

- HD TV camera
- Digital still camera
- Imaging sonar



H800-SUR SEABED SURVEY

- Viewing systems & sonar
- Altimeter echo sounder, with auto-altitude function
- Side scan sonar



H800-PS PIPE AND CABLE SURVEY

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



H800-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



H800-CS CORAL SAMPLING & ANALYSIS

- Imaging sonar
- USBL positioning system
- 5-function electric manipulator arm with grabber tool
- Motorized 6 compartments special receiver, able to store the coral sample and its surrounding water



H800-CBRN CBRN MEASUREMENT

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



H800-NDT NON DESTRUCTIVE TESTING

- Cathodic protection
- Thickness measurement
- Brush
- Any other sensor: Hydrophone, temperature, leak detection...



H800-CT CABLE & PIPE TRACKING

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



H800

1000 M OBSERVATION CLASS ROV
FOR SUBSEA OPERATIONS

VEHICLE

PERFORMANCES

- Movements: in three axis, plus rotation on its own axis
- Forward speed: 4.5 knots (in 0 knot current)
- Operating depth: 1000 m in sea water
- Stability: inherent, due to low center of gravity
- Payload: 11 kg with removal of whole ballast – around 30kg more with incorporation of additional buoyancy

GENERAL CHARACTERISTICS

- Dimensions (mm): 992 L x 720 W x 551 H
- Weight in air: 99 kg w/o equipment
- Material: polypropylene frame, stainless steel fittings

PROPULSION

- 6x dc thrusters:
4x horizontal (vectored) / 2x vertical
- Forward thrust: 59 kg
- Lateral thrust: 27 kg
- Vertical thrust: 34 kg

TELEMETRY UNIT

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

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^{-4} lux

Headlights

- Two fixed LED lights (4000 lm), variable intensity

Scanning / Navigation sonar

- Any type, any brand

SENSORS

Heading

- 3axis 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

- Navigation and profiling sonar
- Imaging sonar
- 2-function electric manipulator arm
- Digital still camera with flash
- LBL or USBL positioning system
- Xenon strobe recovery unit
- Altimeter (comes with auto altitude function)
- Rear B/W TV camera
- Dead weight
- Acoustic pinger
- LARS + TMS

OPTIONAL SKIDS

- Single or dual 5-function electric manipulator arm:
 - 1x 5E-MICRO: 10 kg lifting
 - 1x 5E-MINI: 25 kg lifting
 - 2x 5E-MICRO: 2x10 kg lifting
- Metal detector - Side scan sonar - NDT sensors - 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: 3x400VAC ; 8 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

TMO 600: manual winch with 600 m umbilical cable capacity

TMO 1500 EO: motorized winch with 1200 m capacity of fiber optic umbilical cable



www.ecagroup.com

ASIA - PACIFIC

ECA GROUP ASIA

33 Ubi Avenue 3, Vertex #02-31/32
Singapore 408868

Phone: +65.6636 5459

E-mail: eca-asia@ecagroup.com

FRANCE & OTHER COUNTRIES

ECA ROBOTICS

Z.I. Toulon Est - 262, rue des frères Lumière
83130 La Garde - France

Phone: +33 4 94 08 90 00 - Fax: +33 4 94 08 90 70

E-mail: sales.robotics@ecagroup.com