



H300 MK2

300 M OBSERVATION CLASS ROV
FOR SUBSEA OPERATIONS

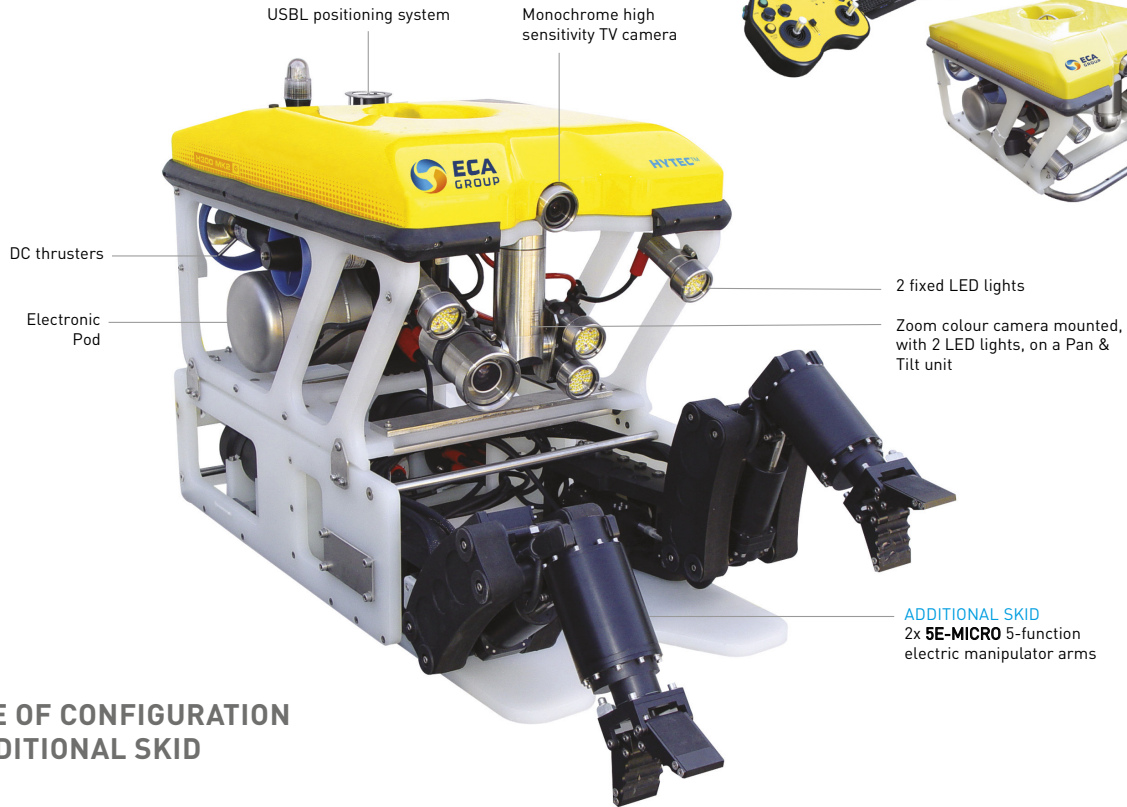
- MAN PORTABLE, COMPACT
- HIGH PERFORMANCE VIEWING SYSTEM
- MODULAR DESIGN, OPTIONS SIMPLE TO ADD
- EASY ACCESS FOR MAINTENANCE



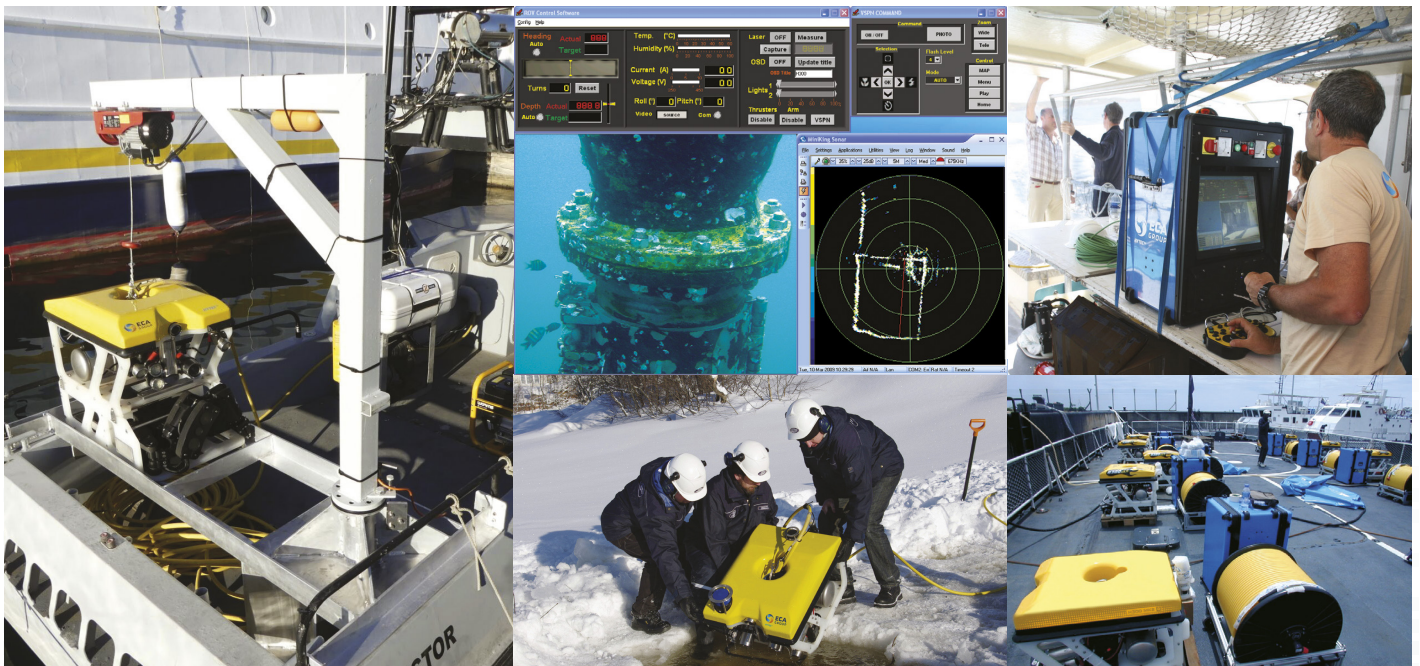
DISCOVER H300 MK2 SKID-BASED MODULAR ARCHITECTURE

CONFIGURE ACCORDING TO YOUR NEEDS

**BASIC
SYSTEM**



EXAMPLE OF CONFIGURATION WITH ADDITIONAL SKID



FOR SPECIFIC MISSIONS, CUSTOMIZE YOUR H300 MK2 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



H300 MK2-INS

SUBSEA OBSERVATION, INSPECTION & SURVEILLANCE

ROV highly equipped in viewing systems and sonars:

- HD TV camera
- Digital still camera
- Imaging sonar



H300 MK2-PS

PIPE AND CABLE SURVEY

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

H300 MK2-OR / H300 MK2-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



H300 MK2-SUR

SEABED SURVEY

- Viewing systems and sonars
- Altimeter and auto-altitude function
- Side scan sonar

H300 MK2-CT

CABLE & PIPE TRACKING

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

H300 MK2-CBRN

CBRN MEASUREMENT

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



H300 MK2

300 M OBSERVATION CLASS ROV
FOR SUBSEA OPERATIONS

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): 900 L x 470 H x 600 W
- Weight in air: 70 kg excluding optional equipment
- Material: polypropylene frame, SS fittings

PROPULSION

- Horizontal: 2 thrusters
forward thrust : 34kg
- Vertical: 1 thruster; thrust: 17 kg
- Lateral: 1 thruster; thrust: 17 kg

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: $3 \cdot 10^{-4}$ 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
- 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. The PC with 17" TFT LCD screen, allows a 19 200 bauds communication with vehicle, RS485 format scroll-down menus on the screen for:

- 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: 230VAC ; 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



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