



# H300 MKII

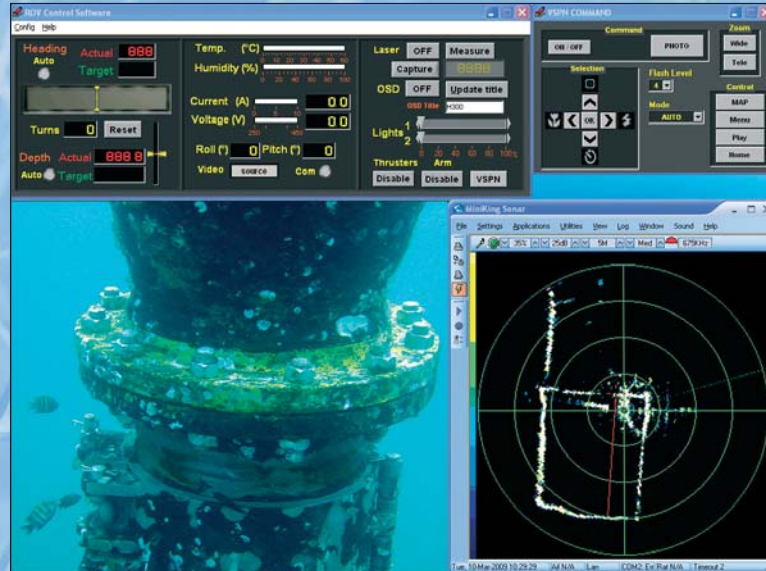
300m ROV for subsea inspection & observation



# Class II ROV for subsea inspection & observation



- ROV depth rated to 300 meters
- Powerful, while compact in size
- High performance viewing system
- Highly equipped in standard version
- Modular and flexible design; options simple to add
- Easy access to all sub-systems for maintenance



Alternative display with video, digital still camera control, sonar.



The control unit includes a power supply module.

A single and ergonomic hand controller allows the control of both the ROV and a 5 function manipulator arm.

The umbilical cable (maximum length 400m) can be housed on a manual winch, easy to transport, and equipped with a slip ring assembly.

Configure according to your needs!

BASIC SYSTEM



Zoom colour camera mounted, with 2 lights, on a P/T unit

2 function electric manipulator (optional)

Strobe  
Acoustic pinger  
USBL positioning system

Digital still camera & flash

Sonar

Manipulator arm skid

EXAMPLE OF FULLY EQUIPPED ROV

OTHER OPTIONAL TOOLS AND SENSORS MOUNTED ON SKID



Single piece didson sonar



Metal detector



Side scan sonar

# H300 MKII

## 300m ROV for subsea inspection & observation

### VEHICLE **ROVH300-STD1**

#### Performance

Movements	: in three axis, plus rotation on its own axis
Forward speed	: 3.5 knots (in 0 knot current)
Operating depth	: 300 meters in sea water
Stability	: inherent low center of gravity
Payload	: 8 kg with removal of whole ballast

#### General characteristics

Dimensions (mm)	: 900 L x 470 H x 600 W
Weight in air	: 70 kg excluding optional equipment
Material	: polypropylene frame, stainless steel fittings

#### Propulsion

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

Each thruster is equipped with a brushless motor.

#### Telemetry unit

Communication through RS485 data unit  
Advanced power management system  
Extra data link for sonar.

#### Viewing system

Inspection TV camera **VS1673DL3SI**  
Colour (PAL or NTSC) zoom camera mounted on external P/T unit  
**VSPH300** (Pan 140° ; Tilt 120°), with two lights:  
- lens : 10 x zoom (2.5-25 mm) / F1.8  
- resolution : 460 TV lines  
- minimum illumination : 1.5 lux at F1.8  
- shutter : electronic, adjustable 1/3 to 1/10 000 sec  
- laser 2D measurement : two integrated laser diodes 1 mW  
- two 75 W halogen lights, variable intensity

#### Navigation TV camera **VS300**

Low light B/W on top part of vehicle:  
- lens : 3.6 mm / F1.6 ; angle of view: 68°  
- resolution : 570 TV lines  
- sensitivity : 0.01 lux

#### Headlights **VSE300SS**

- two 75 W halogen lights / Variable intensity

#### Sensors

Heading	: 3 axis magnetometer sensor : precision: +/- 1% : <u>auto heading function</u>
Depth	: piezoresistive type sensor : precision: 0.1% full scale : <u>auto depth function</u>
Other sensors	: inside temperature : water ingress : amperage feedback

#### Optional skids

- 5 function hydraulic manipulator arm **BMHLK2H300**
- Single or double piece " Didson " type sonar **DIDSONSKID - HY0834200**
- Metal detector **MD1H300X**
- Side scan sonar **SN5H300**

#### Optional equipment

- Navigation and profiling sonar
- 2 function electric manipulator arm **BME2H300**
- VSPN 304 digital still camera with VSF303 flash gun **EVNH300-2**
- LBL or USBL positioning system
- Xenon strobe recovery unit **EECL0000204**
- Altimeter (comes with auto altitude function) **ALTH300 / ALT2H300**
- Rear B/W TV camera **VS300H300AR**
- 30 kg dead weight **LEST30KH300**
- Acoustic pinger **EDET0000071**

### SURFACE CONTROLS

#### Control unit **VSRH300MKII**

Incorporates a PC, the power supply module and a digital recorder.  
Racked (19") in a shockproof case with removable front and rear covers ;  
IP 52

The PC, with 15" 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
  - digital still camera controls
  - recording of 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): 564 L x 900 H x 500 W

Weight: 70 kg

#### Hand box controller **HY0828100**

- 4 axis joystick for ROV movements, with a POV (Point of View)  
for the P/T unit controls and 4 axis joystick for the manipulator arm.  
Switches for colour TV camera controls (zoom, focus)

#### Operating conditions

Operating Temperature	: 0° to + 50°C
Storage temperature	: -10° to +60°C
Humidity	: 90%

#### Umbilical cable **OMB300H300S10X**

Length	: 300 m
Diameter	: 19.5 mm
Weight in air	: 0.30 kg/m
Volumic mass	: 0.99 kg/dm <sup>3</sup>
Buoyancy	: positively buoyant in water
Strength	: 300 kg operational traction
Connector	: Subconn type

#### Winch **TMO450**

Storage capacity	: 310 m of 19.5 mm cable
Dimensions (mm)	: 820 L x 750 H x 840 W
Weight with 300 m cable:	110 kg