

## H300

ROV for subsea inspections and observations up to 300 meters depth



# ROV H300

LOOKS SMALL, ACTS BIG



### ■ Umbilical cable

Length : 300 meters  
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

Storage capacity : 320 m of 19.5 mm cable  
Dimensions : length 82 cm x width 84 cm x height 75 cm  
Weight with 300m cable : 135 kg  
Electric motor optional

### ■ Power supply cabinet

Input : 230 Vac / 50 or 60 Hz / 3 Kva  
Output : 400 Vdc / 6.25 A  
Incorporates electric protections against over-voltage, over-intensity and insulation defect  
Size : 600 mm width x 600 mm depth x 400 mm height  
Weight : 82 kg ; cabinet equipped with handles for transportation  
Protection : IP 52

### ■ System shipping information

1 container for vehicle  
Dimensions : 93 cm length x 70 cm width x 67 cm height  
Weight : 90 kg  
1 container for control unit and hand box  
Dimensions : 71 cm length x 52 cm width x 100 cm height  
Weight : 80 kg  
1 winch with umbilical cable  
Dimensions : 90 cm length x 92 cm width x 100 cm height  
Weight : 130 kg  
1 case for power supply cabinet and connecting cables  
Dimensions : 65 cm length x 45 cm width x 85 cm height  
Weight : 110 kg

### ■ Optional equipment

Navigation sonar  
Electric or hydraulic manipulator arm  
VSPN 300 digital stills camera  
- installed as substitute to colour zoom camera on the P/T unit  
- with VSF300 flash gun  
Acoustic pinger for locating  
Xenon strobe recovery unit.

*Design and specifications subject to change without notice*

Eca Hytec 03/2004

- 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

## VEHICLE

### ■ Performances

Movements : in three axis, plus rotation on its own axis  
 Forward speed : 2.5 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 : length : 84 cm ; width : 60 cm ; height : 47 cm  
 Weight in air : 65 kg excluding optional equipment  
 Material : polypropylene frame, stainless steel fittings

### ■ Propulsion

Horizontal : 2 thrusters ; forward thrust : 20 kg  
 Vertical : 1 thruster ; thrust : 10 kg  
 Lateral : 1 thruster ; thrust : 10 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

Colour (PAL or NTSC) zoom camera mounted on external P/T unit (Pan 140° ; Tilt 120°), with two lights :  
 - lens : 10 x zoom (3-30 mm) / F1.8  
 - resolution : 460 TV lines  
 - minimum illumination : 1 lux  
 - 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

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 : two 75 W halogen lights  
 : variable intensity

### ■ 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

## SURFACE CONTROLS

### ■ Control unit

Incorporates a PC and a VCR (or a DVD recorder), racked (19") in a shockproof case with removable front and rear covers ; IP 52

The PC, with 15" TFT LCD screen, permits :

- 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 stills 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/stills)
- display on the screen of TV image, navigation parameters, amps & voltage, fault indicators.



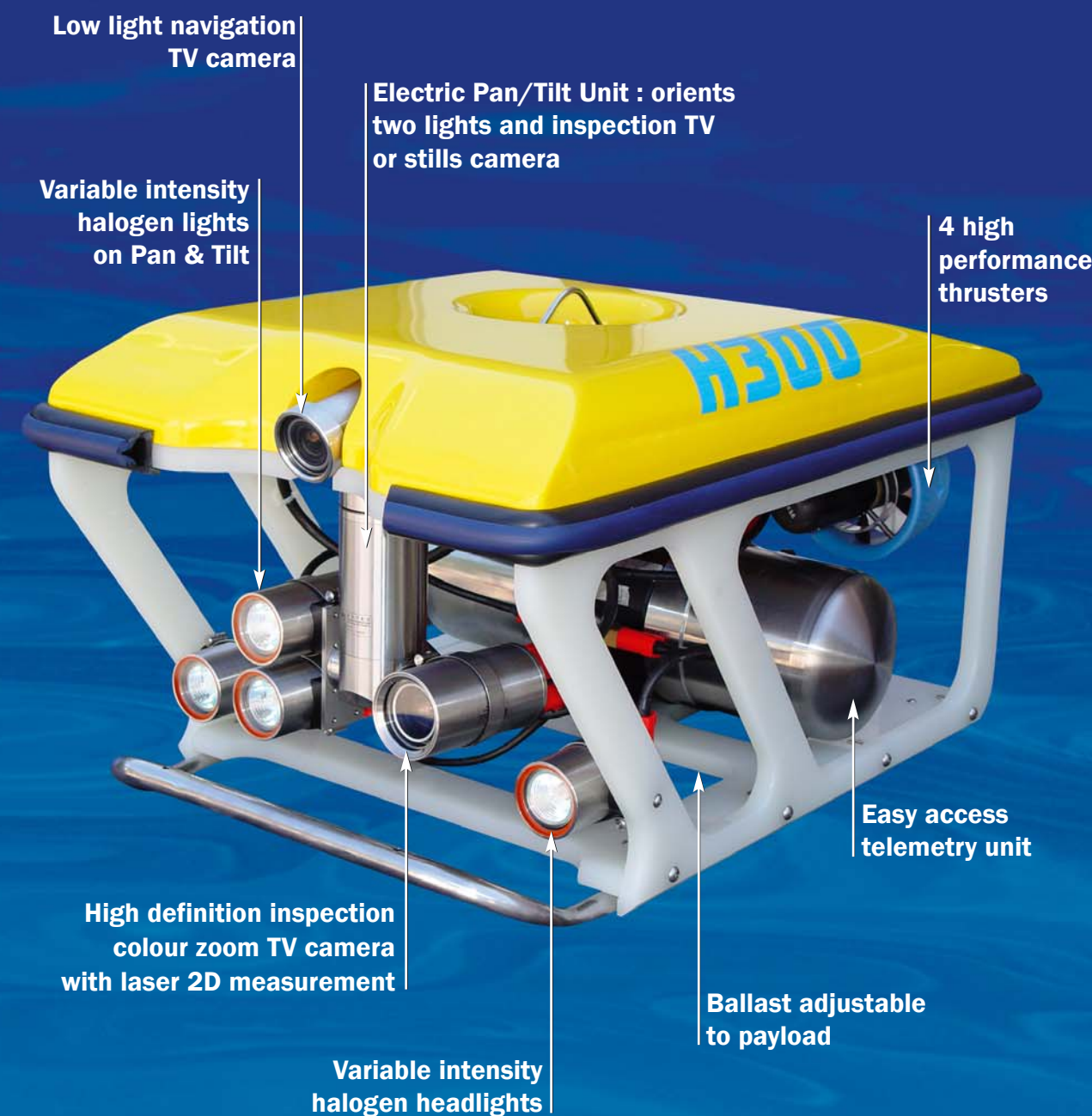
Dimensions:  
 64 cm L x 56 cm W x 63 cm H  
 Weight: 40 kg

### ■ Hand box controller

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

### ■ Operating conditions

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



## OPTIONAL EQUIPMENT



Navigation sonar



Manipulator arm



Digital stills camera with flash unit