

# VALOR

Versatile and Lightweight Observation ROV

## *Reaching beyond its class.*

Reaching beyond its class, the VALOR (Versatile and Lightweight Observation ROV) is the lightest yet most powerful Observation ROV available.

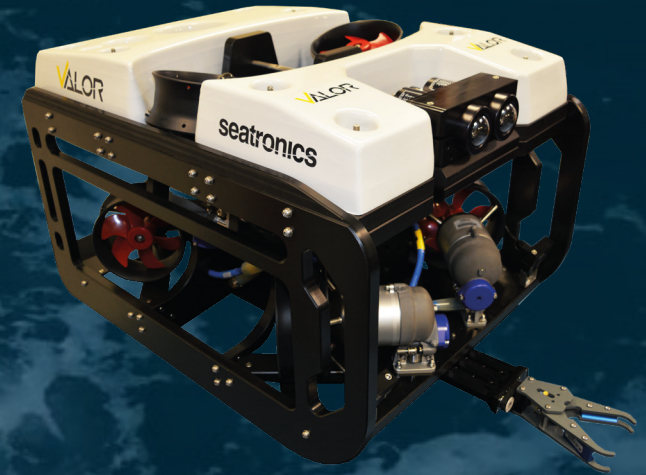
The standard system has been built to 300m depth rated, however the unique design of this platform allows the vehicle to be extended up to 1000m with simple modifications.

The versatility of VALOR is limitless given the significant payload, unrivalled power capability and available bandwidth allowing the ROV to manage complex tooling and sensor packages.

### **Payload Examples**

- Dynamic Laser Scanning skid with INS
- Dual 5-function electric manipulators skid
- Cavitation cleaning skid with onboard pump

**Bespoke Solutions** - all tooling and sensor packages tailored to suit client requirements.



### **Key Features**

- The lightest ROV platform in its class
- The highest payload in its class
- System power beyond its class
- No power compromised for portability
- Ability to manage complex tooling & sensor packages
- Industry leading control software
- More thrust than any other vehicle in this class
- An extremely flexible and configurable platform
- Supports multiple 1Gbps Ethernet links
- Mid-water Station Keeping

VALOR Specifications	VALOR	VALOR ELITE
Depth Rating	300 m (1000 ft.)	
Length	860 mm (33.9 in)	
Width	600 mm (23.6 in)	
Height	550 mm (21.7 in)	
Weight in Air	~ 80 kg (176 lbs)	
Max Payload	~ 21 kg (46 lbs)	
Through Frame Lift	100 kg (220 lbs)	
System Input Voltage	3 Phase 415 VAC (Operating Range 373 – 456VAC)	3 Phase 415 VAC (Operating Range 373 – 456VAC)
System Input Current	20 A – Base System	20 A – Base System 39A – with Optional Tooling PSU
Power Delivered to ROV	800V DC 10kW Base System	800V DC 10kW Base System 10kW with Optional Tooling PSU ( <i>at additional cost</i> )
Tether (300m supplied) <sup>1</sup>	6 x Power Conductors, 4 x SM Fibre, 1x Shielded Twisted Pair	6 x Power Conductors, 4 x SM Fibre, 1x Shielded Twisted Pair
Topside Weight	80 kg (176 lbs)	
Display	1 x 17.3" Rackmount HD Monitor 1 x Rackmount HD Touchscreen Monitor	
Surface Display Console	Transit Case - 417mm (H) (16.4 in) x 583mm (W) (23 in) x 870mm (D) (34.2 in)	
Input Device	Topside Controller c/w Hand Controller	
Number of Horizontal Thrusters	4 Thrusters vectored at 45°	
Type of Horizontal Thrusters	RS485 controlled Brushless DC	
Number of Vertical Thrusters	2 Thrusters angled at 30°	
Type of Vertical Thrusters	RS485 controlled Brushless DC	
Thrust Forward	71Kgf (157 lbf)	
Thrust Backward	71Kgf (157 lbf)	
Thrust Lateral	71Kgf (157 lbf)	
Thrust Vertical	43Kgf (95 lbf)	
Number of Lights	4	4
Type of Lights	Teledyne 1500-B-LED, 1500 Lumen dimmable LED	Teledyne 1500-B-LED, 1500 Lumen dimmable LED
Number of Cameras Supplied	2 x GigE Cameras	2 x HD Cameras to be supplied
Type and Number of Cameras Supported	6 x 3G HD-SDI Up to 10 x GigE Vision / IP Cameras	6 x 3G HD-SDI Up to 10 x GigE Vision / IP Cameras
Expansion Ports	5 x User connectors each supporting; <ul style="list-style-type: none"> <li>• Variable 12V DC- 48V DC software configured power output<sup>2</sup></li> <li>• Gigabit Ethernet</li> <li>• RS232/422/RS485 (software selectable)</li> <li>• 1 PPS</li> <li>• TTL Sync in<sup>3</sup></li> <li>• TTL sync out<sup>3</sup></li> <li>• Analog in ± 10V 16-bits</li> <li>• Analog out ± 10V 12-bits</li> </ul> <i>Option to increase to up to 10 user connectors &amp; add AUX / Tooling Hybrid Connector</i>	10 x User connectors each supporting; <ul style="list-style-type: none"> <li>• Variable 12V DC- 48V DC software configured power output<sup>2</sup></li> <li>• Gigabit Ethernet</li> <li>• RS232/422/RS485 (software selectable)</li> <li>• 1 PPS</li> <li>• TTL Sync in<sup>3</sup></li> <li>• TTL sync out<sup>3</sup></li> <li>• Analog in ± 10V 16-bits</li> <li>• Analog out ± 10V 12-bits</li> </ul>
Pilot Aids	<ul style="list-style-type: none"> <li>• Auto Heading</li> <li>• Auto Depth</li> <li>• Auto Altitude (requires DVL / Altimeter to be fitted)</li> <li>• Auto Hover<sup>4</sup></li> <li>• Advanced Navigation Spatial Gyro</li> <li>• Greenseas Advanced (Option)</li> </ul>	

<sup>1</sup> 300m recommended for optimum performance

<sup>2</sup> 3A maximum current per port

<sup>3</sup> Software routable between surface control and any combination of expansion ports

<sup>4</sup> Adequate for pilot to take hands off the controls for short durations