

Product Data Sheet

Mission Specialist PRO 5

The VideoRay **Mission Specialist Series Pro 5** utilizes a system of interchangeable, modular components residing on a single, intelligent network. This topology provides an extremely flexible and customizable platform which can be easily adapted to target specific missions. It is this flexibility which sets apart the Mission Specialist ROV Series from current technology in the Remotely Operated Vehicle Industry.



SYSTEM INFORMATION

Power Requirements	110/220VAC (1 to 2.6kW)
Total System Weight (sub and panel)	34.8 kg (76.9 lbs)
Cases	2-3 Watertight Rugged Hard Cases
Owner's Manual	Online Digital
System Tool Kit	Included
Communications Protocol	RS-485 and Ethernet
Warranty	2 Year Comprehensive

SUBMERSIBLE

Depth Rating	Up to 305m (1,000ft)
Size (l x w x h)	49.6 x 34.7 x 22.3 cm (19.6" x 14.7" x 8.8")
Weight	10 kg (22 lbs)
Ballast	Modular
Case	62.5 x 49.3 x 35.1 cm (24.6" x 19.4" x 13.8") less than 22.7 kg (50lbs) with submersible and payload

CAMERA

HD with Ethernet interface (IP)	
Video	up to 1920 x 1080, 25 FPS
Mechanical	Standard VideoRay 9 pin connection Ethernet, 12VDC, RS-485 Auto or Manual Focus Optical Glass Dome
Features	White Balance Control up to 16x Digital Zoom (64 steps) 13 Megapixel Still Image Capture
Sensitivity	Less than 1 lux (standard)
View Angle	160 degrees Tilt (180-degree FoV)
Horizontal	136 degrees
Vertical	91 degrees
Interface	Ethernet
Compression	MJPEG

PROPULSION

Brushless thruster with integrated controller	
2 Vectored Horizontal Thrusters	
Forward	20.3 kg (44.7 lb.)
1 Vertical Thruster	
Max speed	> 4.4 knots

POWER

400 VDC power module	
1500W @ 48VDC	
Full monitoring of input voltage, output current, temperature	

BUOYANCY

Float	305m rated
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COMMUNICATIONS

3 x 100Mbps Ethernet ports
3 x RS-485 ports
Power control and monitoring

LIGHTING

LED
2 independent light arrays each at 38 Watts max
60-degree spot beam
110-degree flood beam
Each array can be individually controlled
3,000 K CCT, 80 CRI White
7,600 total lumens per LED light module
15,200 lm total light

IMU

9 DOF IMU and magnetic compass
Pressure based depth sensor: 100 Bar, with 400 Bar optional
0.2 degree Static Roll/Pitch / 0.5 degree Dynamic Roll/Pitch
1.0 degree Yaw
18 degree/h Gyro Bias stability

CONTROL BOX

Power Input	90-260 VAC (47-440 Hz)
Power Output	400VDC, 2600W
Display	HD Daylight Viewable Monitor
Weight	15.2 kg (33.6 lb)
Case	Water tight - 0.62" x 16.87" x 8.12" (52.37 x 42.85 x 20.62cm)
Processing	Integrated i7 system processor
Controller	Industrial Programmable Hand Controller
Safety	Integral Line Isolation Monitor Emergency Kill Switch
Ports	3 external USB ports 1 external Ethernet port

TETHER

Length	100 m (328 ft) Neutral Buoyancy Performance
Sections	Single
Diameter	9.6 mm
Breaking Strength	680 kg (1,500 lb.)
Management	Tether Deployment and Storage Reel

Payloads

Sonar

Blueprint Oculus forward-looking multibeam sonar

Manipulator

Dual axis Manipulator
Single axis manipulator