

Accessory Data Sheet

V Series

2D Multibeam Imaging Sonar

The Teledyne BlueView V Series 2D Imaging Sonar has been developed exclusively for VideoRay Pro 4 ROVs. Ideal for underwater detection and identification tasks in low or zero visibility conditions, the V Series sonar provides both midrange detection and close-range identification capabilities from moving or stationary platforms.

Adapted from the high-performance P900 Series sonar, the V Series features the same power and capability of its predecessor in a 30% smaller package. The V Series is available with either a 90° or 130° field-of-view (FOV). The V Series sonar seamlessly integrates into the Pro 4 ROV platform through the custom skid mount and VideoRay Cockpit software. The Integration Skid mounts on the ROV in the field within seconds, allowing for quick addition or removal mid-operation if necessary. All V Series sonars are delivered with an Integration Package containing all necessary hardware and software for operation with the VideoRay Pro 4 ROV.

PRODUCT APPLICATIONS

All V Series Sonar operate while in motion, delivering real-time imagery and data.

- ROV navigation
- Operations monitoring
- Object detection
- Equipment/tool placement
- Target tracking
- Search and recovery
- Obstacle avoidance
- Area survey



SONAR

V-90 MODEL

Operating Frequency	900 kHz
Update Rate	Up to 15 Hz
Field of View	90° x 20°
Maximum Detection Range	100 m (328 ft)
Optimal Range	2 - 60 m (6.6 - 196.9 ft)
Beam Width	1° x 20°
Number of Beams	512
Beam Spacing	0.18°
Range/Time Resolution	25.4 mm (1.0 in)

V-130 MODEL

Operating Frequency	900 kHz
Update Rate	Up to 15 Hz
Field of View	130° x 20°
Maximum Detection Range	100 m (328 ft)
Optimal Range	2 - 60 m (6.6 - 196.9 ft)
Beam Width	1° x 20°
Number of Beams	768
Beam Spacing	0.18°
Range/Time Resolution	25.4 mm (1.0 in)

INTERFACE

V-90 MODEL

Supply Voltage	12 - 48 VDC
Power Consumption	17 W max
Connectivity	Ethernet

V-130 MODEL

Supply Voltage	12 - 48 VDC
Power Consumption	17 W max
Connectivity	Ethernet

MECHANICAL

V-90 MODEL

Depth Rating	305 m (1000 ft)
Weight in Air	1.5 kg (3.4 lbs)
Weight in Water	0.20 kg (0.44 lbs)
	Negative in freshwater
Size (Diameter x Length)	102 mm x 206 mm (4 in x 8.1 in)

V-130 MODEL

Depth Rating	300 m (1000 ft)
Weight in Air	1.5 kg (3.4 lbs)
Weight in Water	0.20 kg (0.44 lbs)
	Negative in freshwater
Size (Diameter x Length)	102 mm x 206 mm (4 in x 8.1 in)

ENVIRONMENT

V-90 MODEL

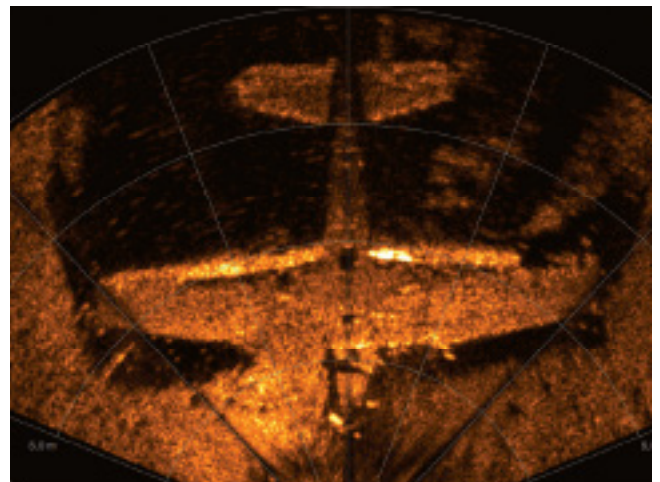
Operating Temperature	0 - 40 °C (32 - 104 °F)
Storage Temperature	-10 - 60 °C (14 - 140 °F)

V-130 MODEL

Operating Temperature	0 - 40 °C (32 - 104 °F)
Storage Temperature	-10 - 60 °C (14 - 140 °F)



VideoRay Pro 4 ROV with V Series Imaging Sonar, Sonar Integration skid, Manipulator Arm



130° Field-Of-View (FOV) 2D Imaging Sonar still image of a sunken WWII Grumman F6F Hellcat Fighter Aircraft