

# 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             | 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) |

### 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

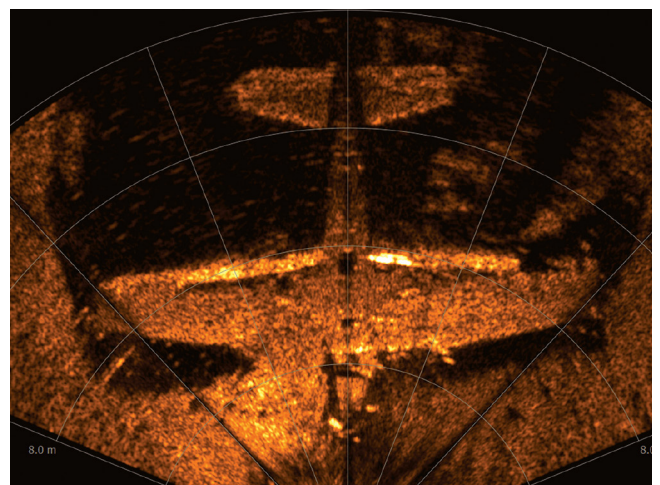
|                       |                           |
|-----------------------|---------------------------|
| Operating Temperature | 0 - 40 °C (32 - 104 °F)   |
| Storage Temperature   | -10 - 60 °C (14 - 140 °F) |

### 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*