### **Teledyne BlueView**

## **M** Series

### 2D Imaging Sonar

The most compact, full featured 2D Multibeam Imaging Sonar available. The M Series fits where other multibeam imaging sensors can't, delivering crisp, real-time streaming sonar imagery. The M Series is:

- Smallest in class: ≈ 95 in<sup>3</sup> (1557 cm<sup>3</sup>)
- Lightest in class: < 1.1 lbs. in water
- Widest field-of-view in class: 130°
- Lowest power in class: < 20 watts
- Built-in target detection and tracking feature
- Capture sonar, video, and position data in software package

**ProViewer® and ProViewer Plus®:** Delivered with each M Series sonar enabling immediate out-of-the-box operation PC with a Windows® based PC, no licensing fees required. Features:

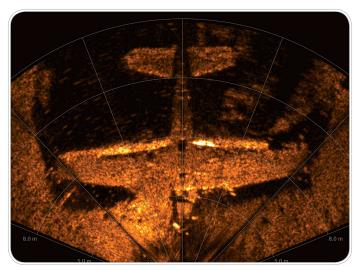
- Intuitive, easy-to-use interface
- Crisp, detailed real-time imagery
- On the fly point-to-point measurements
- Video synchronization
- Georeferencing
- Movie exports
- Track multiple targets simultaneously
- Streaming data for automated navigation & OAS
- Enables ROV dynamic positioning
- Easy movie exports

ProViewer Plus features the most advanced target tracking capbilities through exclusive data analytics developed by SeeByte.

# Plue View

**Software Development Kit (SDK):** Sold separately, the Teledyne BlueView SDK enables sonar integration into complex platforms and/or customized systems by enabling control of the sonar with access to raw data files to control sonar operation and enable data flow-through. Features:

- Single .zip file
- Windows<sup>®</sup> and Linux versions available
- C/C++ libraries included
- Documentation to review architecture and logic
- Reference manual and step-by-step guide
- Example files



Sunken WWII Grumman F6F Hellcat Fighter Aircraft.

### **PRODUCT APPLICATIONS**

All M Series sonar operate while in motion or from a stationary position delivering real-time imagery and data.

- ROV navigation
- Object detection
- Target tracking
- Obstacle avoidance

- Operations monitoring
- Equipment/tool placement
- Search and recovery
- Area survey



A Teledyne Marine Company



#### **TECHNICAL SPECIFICATIONS**

Model		M900-45	M900-90	M900-130
Sonar	Operating Frequency	900 kHz	900 kHz	900 kHz
	Update Rate	Up to 20 Hz	Up to 20 Hz	Up to 20 Hz
	Field-of-View	45°	90°	130°
	Maximum Detection Range	100 m (328 ft.)	100 m (328 ft.)	100 m (328 ft.)
	Optimum Range	2 - 60 m (6.6 - 196.9 ft.)	2 - 60 m (6.6 - 196.9 ft.)	2 - 60 m (6.6 - 196.9 ft.)
	Beam Width	1° x 20°	1° x 20°	1° x 20°
	Number of Beams	256	512	768
	Beam Spacing	0.18°	0.18°	0.18°
	Range Resolution	2.54 cm (1.0 in.)	2.54 cm (1.0 in.)	2.54 cm (1.0 in.)
Interface	Supply Voltage	12 - 48 VDC	12 - 48 VDC	12 - 48 VDC
	Power Consumption	13 W avg.	13 W avg.	13 W avg.
	Connectivity	Ethernet/VDSL*	Ethernet/VDSL*	Ethernet/VDSL*
	Protocol	UDP and TCP/IP	UDP and TCP/IP	UDP and TCP/IP
Mechanical	Weight in Air**	5.0 lbs.	5.0 lbs.	5.0 lbs.
	Weight in Water**	1.1 lbs.	1.1 lbs.	1.1 lbs.
	Depth Rating***	1,000 m (3,280 ft.)	1,000 m (3,280 ft.)	1,000 m (3,280 ft.)
	Connector Options	MKS, Burton, SeaNet	MKS, Burton, SeaNet	MKS, Burton, SeaNet
	Size L x W (max OD)	19.20 x 10.16 (OD) cm	19.20 x 10.16 (OD) cm	19.20 x 10.16 (OD) cm
		(7.56 x 4.00 in.)	(7.56 x 4.00 in.)	(7.56 x 4.00 in.)

\*VDSL- Sonar with the onboard VDSL option will have increased length and weight specifications, contact BlueView for details.

\*\*Approximate weight for Lightweight option: In Air - 3.4 lbs; In Water - 0.7 lbs. \*\*\*Depth rating for Lightweight option is 300 meters (984 ft.).



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2151 N. Northlake Way, Suite 214, Seattle, WA USA Tel. +1-206-545-7260 • Fax +1-206-545-7261 • E-mail: info@blueview.com