

M900 Series

2D Imaging Sonar



The most compact, full featured 2D Multibeam Imaging 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: $\approx 95 \text{ in}^3$ (1557 cm^3)
- 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

Specifications

Product	M900 Series v2D Imaging Sonar
Country of origin	USA
Manufacturer	Teledyne Marine

Product applications

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

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

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® and Linux versions available
- C/C++ libraries included
- Documentation to review architecture and logic
- Reference manual and step-by-step guide
- Example files

Benefits

- Built in hardware triggering options
- Built in target tracking options
- Easily fits on any platform
- Expanded area coverage
- High-resolution imagery
- Unaffected by motion
- UDP broadcast modes
- S3 electronics
- Automatically adjust transmit power level to improve imagery up close and at long range
- Easy automation of nav-control systems
Detection & Tracking
- 30% lighter, smaller, faster and less power than P Series

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.)

Specifications

Model		M900-45	M900-90	M900-130
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

Specifications

Model		M900-45	M900-90	M900-130
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 (7.56 x 4.00 in.)	19.20 x 10.16 (OD) cm (7.56 x 4.00 in.)	19.20 x 10.16 (OD) cm (7.56 x 4.00 in.)