

# 1171 SONAR

4000 M MULTI-FREQUENCY IMAGING SONAR WITH COMPOSITE TRANSDUCER AND ETHERNET TELEMETRY



KONGSBERG

## HIGH-PERFORMANCE DOMED IMAGING SONAR P/N 975-21370000

Kongsberg Mesotech is recognized as a leader in single-beam scanning sonars, developing systems with the highest quality and highest resolution on the market. Our sonars are feature-packed and continuously being developed to meet the stringent requirements of the ever-changing subsea industry.

The 4000 m 1171 series of sonar heads has been optimized to meet the requirements of deep-ocean applications.

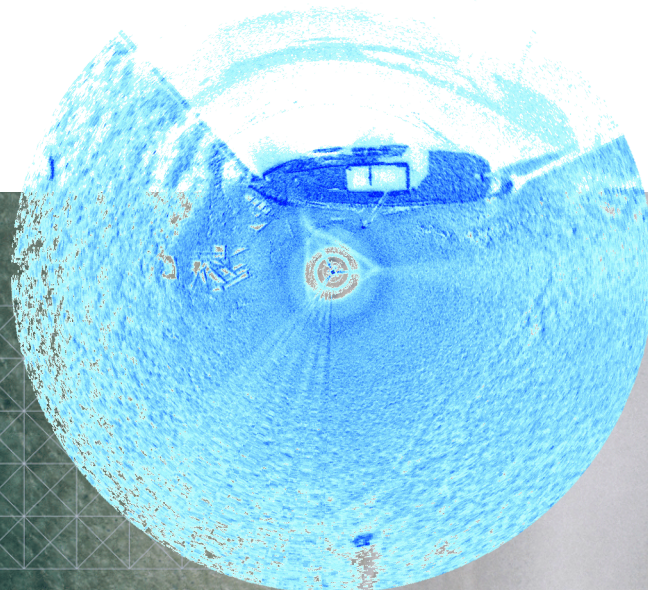
These sonar heads provide a high level of image quality. The wide-band composite transducer is protected within an oil-filled, pressure-compensating dome.

The multi-frequency design allows optimization of the imaging frequency for different applications.

The telemetry is compatible with Ethernet 10Base-T or 100 Base-TX and is automatically sensed and configured at startup. The sonar head is configured and controlled using the MS1000 Software.

### HIGHLIGHTS

- Depth rating: 4000 m
- Robust design
- Low maintenance
- Compact
- Lightweight
- Ethernet Telemetry



# TECHNICAL SPECIFICATIONS

## CLARISCAN PERFORMANCE DATA

**Tunable in 5 kHz steps from 300-600 kHz\* and 605-1200 kHz in both CW and LFM modes**

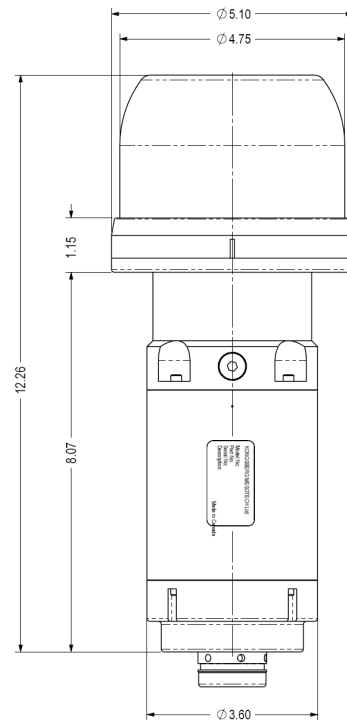
Preset Frequencies	330 kHz	450 kHz	600 kHz	675 kHz	800 kHz	900 kHz	1000 kHz	1100 kHz
Beam Width (nom)	2.7°x26°	2.2°x19°	1.6°x16°	1.4°x36°	1.2°x31°	1.0°x25°	0.9°x22°	0.8°x20°

\* Excluding 570-580 kHz, which is blocked from use

Maximum range	300 m @ 330 kHz, 100 m @ 675 kHz, 50 m 1000 kHz
Minimum range	0.5 m
Range Resolution	≥3.75 mm (variable, determined by transmit-pulse width)
Sample Options	238, 476, 952, 1904 (Low Resolution, High Resolution, Zoom x 2, Zoom x 4)
Sampling Resolution	0.26 mm (0.5 m range @1904 samples), 21 mm (10 m range @ 476 samples)
Scan Speed	typical: 3.7 sec/360° @ 5 m and 1.8° step size (@ 460 kbps) nominal: 34 sec/360° @ 100 m and 1.8° step size (@ 460 kbps)
Scan Angle	360° continuous (user adjustable for limited sector scans)
Step Size	0.45° - 7.2° (user selectable)
Transmit Pulse Widths	5 µs to 1000 µs (auto selected for optimized operation)
Receive Bandwidth	Based on 'Wide' setting: 493 kHz (0.5 m range), 109 kHz (10 m range)
Telemetry	Ethernet 10Base-T or 100Base-TX (Auto-Sensing)

## CLARISCAN PHYSICAL SPECIFICATIONS

Power Requirement	22-26 VDC @ ≤ 0.8 A
Temperature Range	-10 to +40°C operating -30 to +40°C storage
Operating depth	4,000 m
Connector	Seanet 101-5260 Penetrator
Materials	Aluminum 6061-T6, 300 Series S.S., Urethane
Finish	Anodized, Black/Blue MIL-A-8625 type II
Dimensions	Diameter: 5.1 in / 130 mm Length: 12.26 in / 311 mm (excluding connector)
Weight	In Air: 9.5 lb / 4.3 kg In Seawater: 4.2 lb / 1.9 kg



Specifications subject to change without any further notice.

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