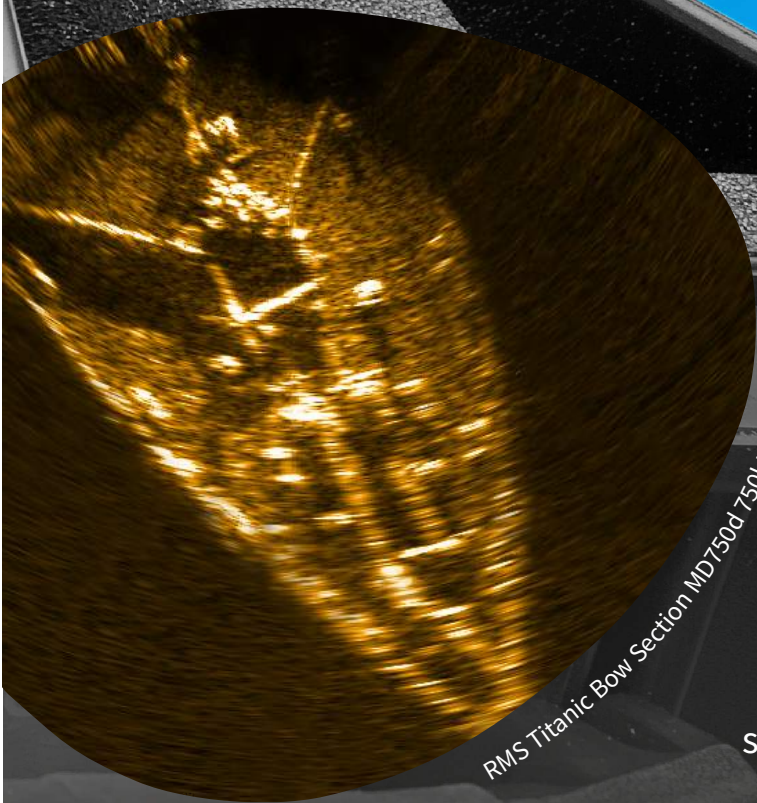




Oculus Multibeam Imaging Sonars

Providing clear real-time imaging in poor visibility or over long range



Redefining multibeam imaging sonars. Oculus, a range of single and dual-frequency sonar systems with unparalleled image quality in a compact, rugged form factor. Available in 500m, 1000m and 4000m depth ratings.

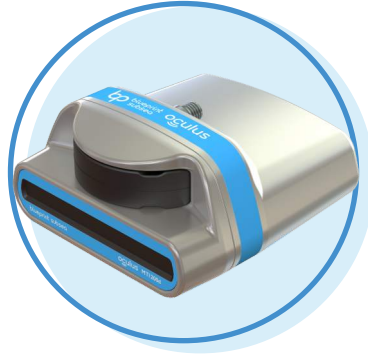
oculus

Systems



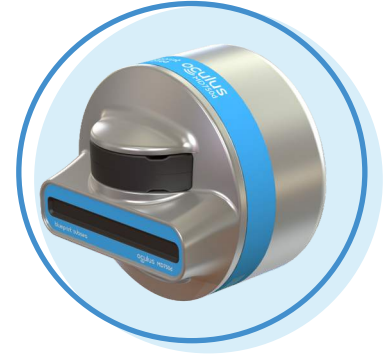
M-Series

The benchmark in multibeam imaging sonars. Providing exceptional image quality and depth rated to 500m.



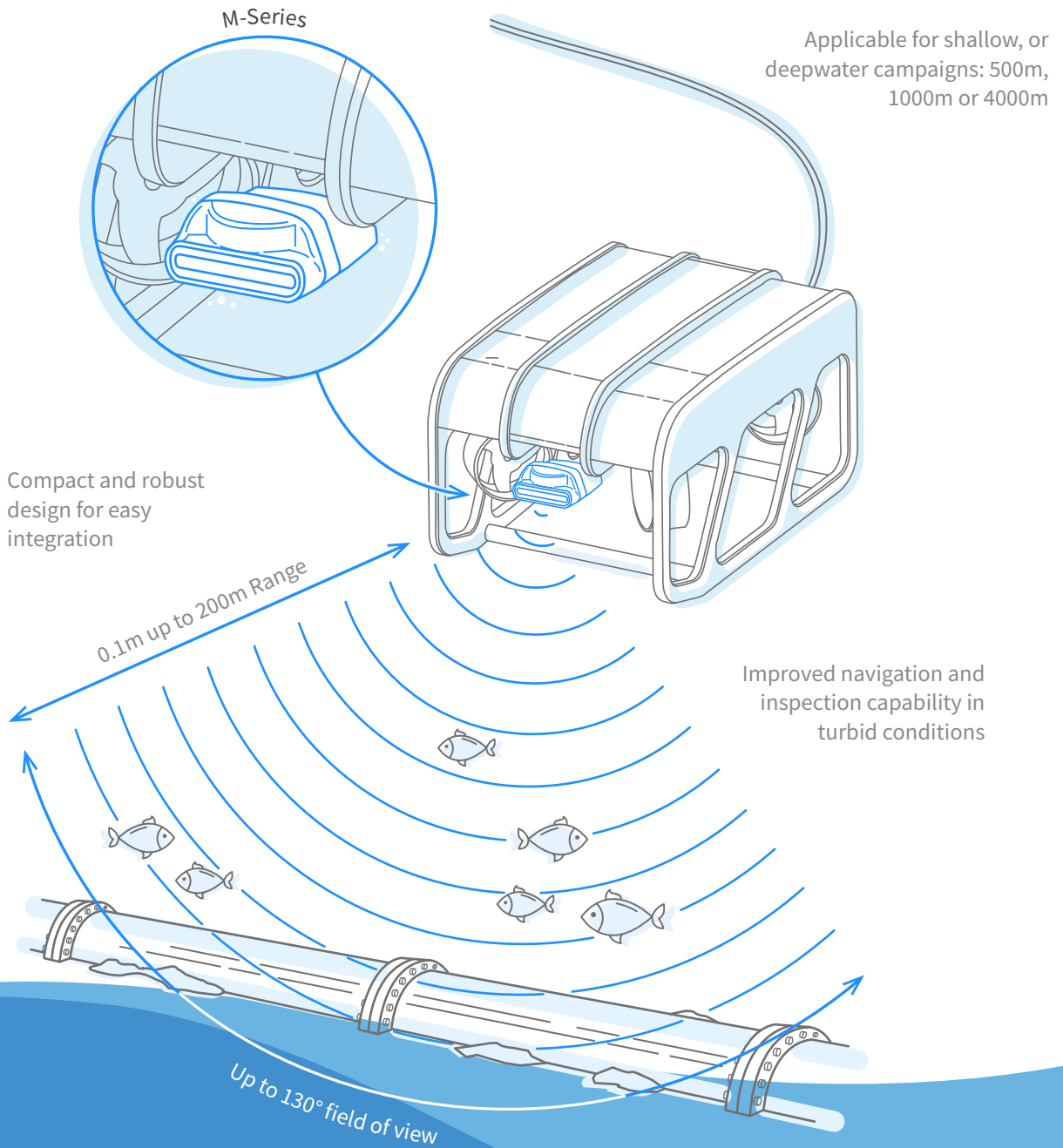
MT-Series

All the benefits of the Oculus M-Series with the advantage of a titanium housing to give a depth rating of 1000m.



MD-Series

The 4000m depth rated titanium housing allows the Oculus MD-Series to withstand the pressures of deep-sea working.



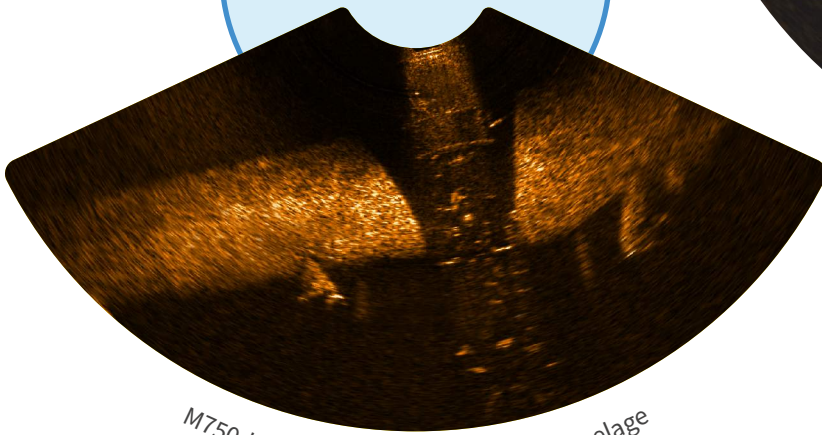
Features

- 375kHz to 3.0MHz, single and dual frequency systems suitable for navigation, situational awareness and inspection work
- Superior wide-angle field of view, up to 130° horizontal / 20° vertical
- Extensive range capability, 0.1m to 200m
- Exceptional image quality, angular resolution down to 0.25°
- Outstanding image definition, range resolution down to 2mm
- Simple and intuitive operator software
- Real-time imaging with ultra-fast update rate of up to 40Hz

Imagery

For longer range
navigation

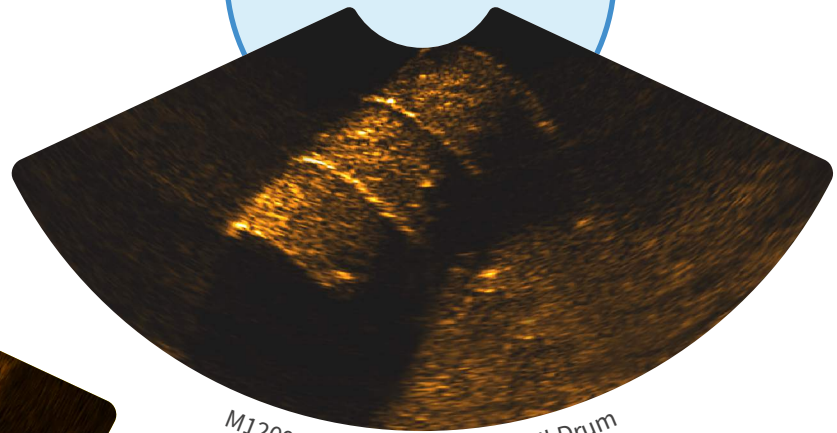
750kHz



M750d 750kHz 20m Range - Aircraft fuselage

For target
identification

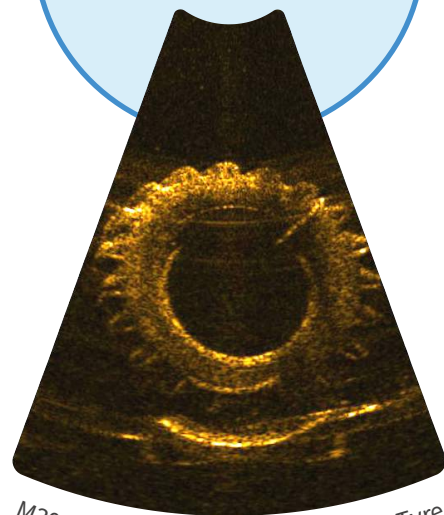
1.2MHz



M1200d 1.2MHz 2m Range - Oil Drum

For ultra-high
resolution

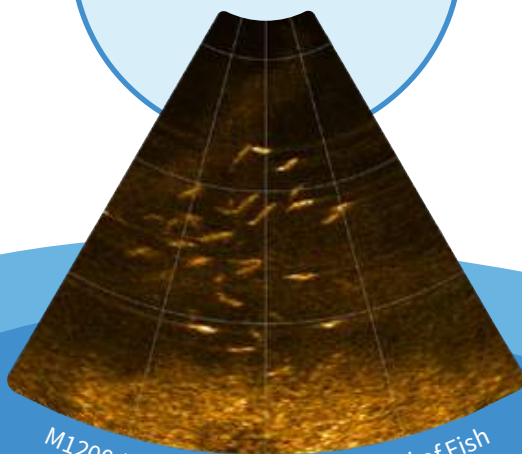
3.0MHz



M3000d 3.0MHz 2m Range - Tractor Tyre

For high resolution
target inspection

2.1MHz



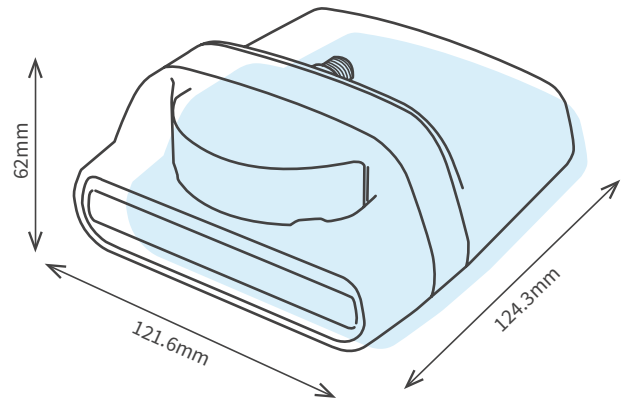
M1200d 2.1MHz 5m Range - School of Fish

M and MT-Series

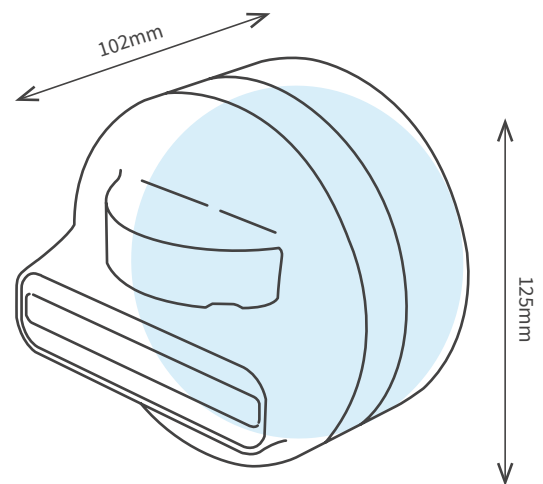
Specification

Mechanical

| | M-Series | MT-Series | MD-Series |
|-------------------------|----------------------------------|----------------------------------|---|
| Dimensions | 125mm (L) x 122mm (W) x 62mm (H) | 125mm (L) x 122mm (W) x 62mm (H) | 125mm (L) <i>excluding connector</i> x ø125mm |
| Construction | Anodised Aluminium | Titanium | Titanium |
| Weight | 980g (Air), 360g (Water) | 1350g (Air), 730g (Water) | 2.5kg (Air), 1.45kg (Water) |
| Depth Rating | 500m | 1000m | 4000m |
| Temp' Range (Operating) | -5°C to +35°C | -5°C to +35°C | -5°C to +35°C |
| Temp' Range (Storage) | -20°C to +50°C | -20°C to +50°C | -20°C to +50°C |



MD-Series



Performance

| | M370s MT370s MD370s | M750d MT750d MD750d | M1200d MT1200d MD1200d | M3000d MT3000d MD3000d |
|-----------------------|---------------------------|---------------------------|------------------------------|------------------------------|
| Operating Frequency | 375kHz | 750kHz / 1.2MHz | 1.2MHz / 2.1MHz | 1.2MHz / 3.0MHz |
| Range (Max) | 200m | 120m / 40m | 40m / 10m | 30m / 5m |
| Range (Min) | 0.2m | 0.1m | 0.1m | 0.1m |
| Range Resolution* | 8mm | 4mm / 2.5mm | 2.5mm / 2.5mm | 2.5mm / 2mm |
| Update Rate (Max)* | 40Hz | 40Hz | 40Hz | 40Hz |
| Horizontal Aperture | 130° | 130° / 130° | 130° / 60° | 130° / 40° |
| Vertical Aperture | 20° | 20° / 20° | 20° / 12° | 20° / 20° |
| Number of Beams (Max) | 256 | 512 | 512 | 512 |
| Angular Resolution | 2° | 1° / 0.6° | 0.6° / 0.4° | 0.6° / 0.4° |
| Beam Separation | 0.5° | 0.25° / 0.25° | 0.25° / 0.16° | 0.25° / 0.1° |

Electrical

| | M & MT-Series | MD-Series |
|--------------------|--|--|
| Connector | Impulse IE55 Series, 6-way | Impulse MC Series, 6-way (Schilling SeaNet / Burton option) |
| Communications | 4-wire 100-BaseT Ethernet, 2-wire DSL extender module | 4-wire 100-BaseT Ethernet, 2-wire DSL extender module |
| Supply Voltage | 12V to 32V DC non-isolated | 18V to 32V DC isolated |
| Power Consumption | 10W to 35W (model and range dependent*) | 10W to 35W (model and range dependent*) |
| Integrated Sensors | Water pressure and temperature (for Velocity-of-Sound calculation) | Water pressure and temperature (for Velocity-of-Sound calculation) |

*Indicates parameter is dependent on range.

Please note that all functions & specifications may be subject to change in line with our policy of continual product development.

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