

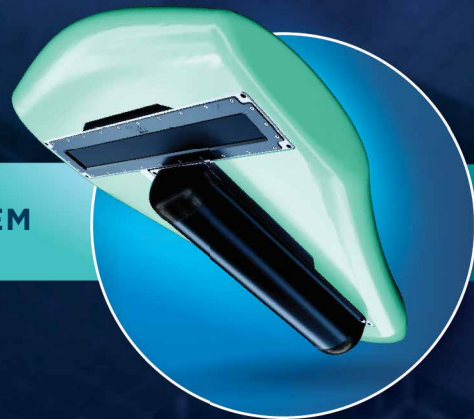


# VOXOMETER

M L XL

THE ONLY MA3 MULTI-ASPECT™ SURVEY SYSTEM

SMART • AGILE • EASY TO OPERATE



# Introducing VOXOMETER®: THE ONLY MA3 MULTI-ASPECT™ SURVEY SYSTEM

Because it measures voxel observations, Voxometer® represents an extremely important industry innovation that offers operators a new, highly effective and efficient way of surveying. In a market category of its own, Voxometer® is a unique and powerful tool in your survey arsenal.

COMPATIBLE WITH ALL SURVEY PLATFORMS



AUV



ROV



USV



Small Vessel



Large Vessel

## SURVEYOR BENEFITS TO TAKE YOUR MISSION TO THE NEXT LEVEL:



### EASE OF OPERATION

- Less skills & experience required to operate the system.
- Completely integrated system that is intuitive and user-friendly



### REDUCED TIME & EFFORT

- Survey at higher speed (primarily governed by the environment/platform)
- Less time spent on set up and mobilization
- Less time spent on data processing



### MAXIMISED PRODUCTIVITY

- Collect different data types at once, in a single pass
- Less overall time and money spent on your survey
- Ongoing addition of system features and benefits
- Reduced payback period on your system investment



### UNPRECEDENTED DATA QUALITY

- Voxometer® technology harnesses a powerful range of patented functions to give you survey data of unsurpassed quality

COMPACT  
VOX-IM



VOXOMETER  
Projector  
Receiver



 **VOXOMETER**  
MLXL

# TWO MODES OF OPERATION FOR ULTIMATE FLEXIBILITY

## 1. VOX MODE

Harnesses a future-proof range of patented functions and features.

### NEQD™

Near  
End-Quality  
Data

*Accurate data  
as you walk off  
the vessel*

### MA3

Multi-Aspect™  
observation of  
voxels

*Multi-Angular  
Multi-Spectral  
Multi-Temporal*

### BSI™

Bottom  
Softness  
Indicator

*Now available  
on every  
survey*

### UDSD®

User Defined  
Sampling  
Density

*Sample the bottom  
exactly where needed,  
at the required density*

### MEGARES®

1MHz Resolution  
- The highest  
available

*Picks up detail that  
lesser frequencies  
cannot*

### SMARTVOX®

Intuitive  
VoxApp®  
Mode

*Auto-calculates  
optimal survey  
parameters*

### TRUEVOX®

Multi-Frequency  
VoxApp®  
Feature

*Collect water column  
& backscatter data  
simultaneously*

### UNS®

Uninterrupted  
Navigational  
Signal

*Accurate positioning,  
when GPS signal is  
temporarily lost*

### PVL®

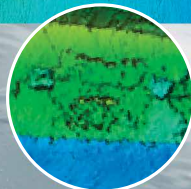
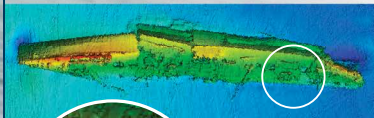
Precision  
Velocity  
Log

*Higher positioning  
precision for  
ROV/AUV*

## 2. CLASSIC MODE

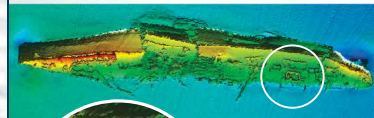
Operates as a multibeam, but with considerable enhancements.

### NORMAL MULTIBEAM



Multiple Passes  
450kHz

### VOXOMETER IN CLASSIC MODE



Single Pass  
600kHz

- Enhanced Dual & Quad mode (sonar outputs 2 or 4 frequencies that are steered fore and aft in every ping cycle)
- Full range of frequencies from 100Hz to 1MHz (MegaRes®)
- Output data to any existing software (user can operate the system in the way that they are most accustomed to)
- Outperforms any multibeam on the market

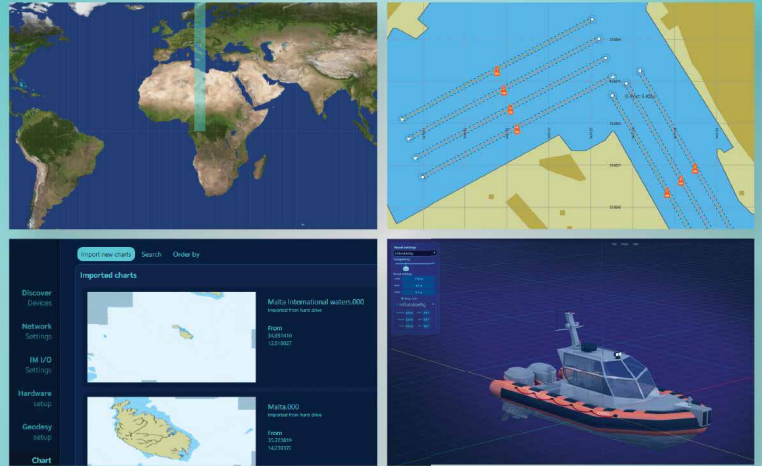
# VOXAPP®

A fully integrated workflow that enables even the most inexperienced operator to perform a high-quality survey.

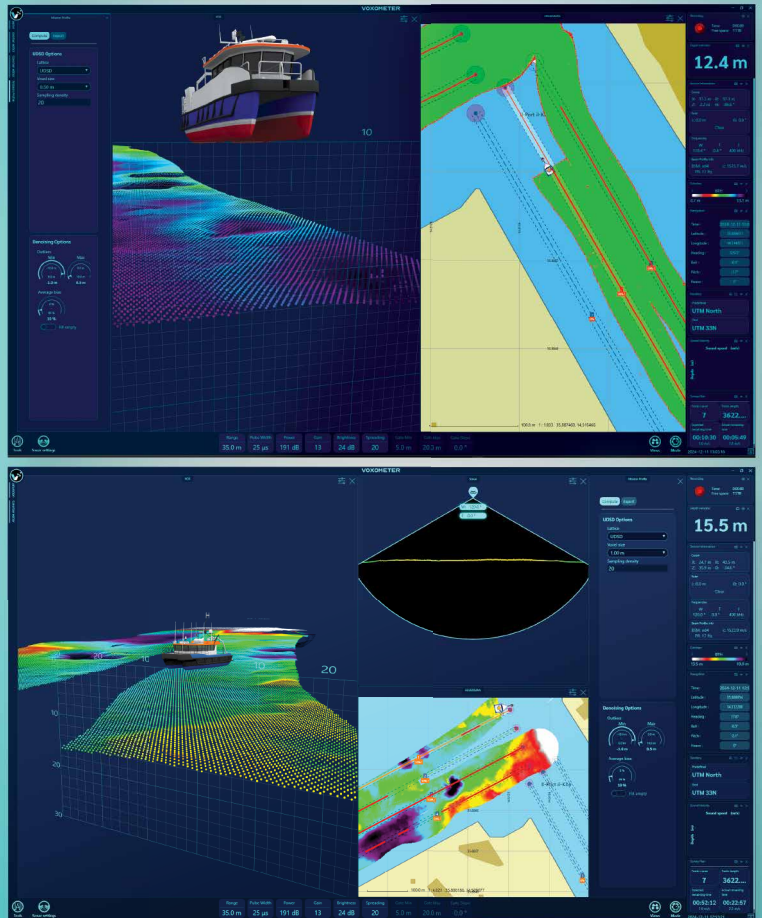
*VoxApp® offers operators easy and intuitive selection of parameters, while automating real-time visualisation of the point cloud...*

- All sensors and software required to perform a survey are native to the design and included with your system
- Voxometer automatically discovers and connects hardware, then guides the user through set up, saving time and reducing the risk of error
- System automation greatly reduces the measurements, calculations and adjustments that operators are required to make. An intelligent system that warns the operator if data is inconsistent
- Select your UDSD®, Voxel size and Vox Mode and you are ready to survey. Sample density is specified by the user at the start of your survey (Vox Mode)
- Provides intuitive data views from any vantage point, without delay
- Collect high precision data like never before
- Real time view of data as it is being acquired - see data in 2D map view or 3D point cloud
- NEQD™ as you step off the vessel - spend less time on post processing (Vox Mode)

EASE OF SET-UP



REAL-TIME SURVEY ADVANTAGE



SCALABLE INNOVATION: VOXOMETER® IS NOW AVAILABLE IN THREE MODELS



TECHNICAL

<i>Beamwidth</i>	0.4° x 0.4° at 1MHz 0.9° x 0.9° at 450kHz 2° x 2° at 200kHz 4° x 4° at 100kHz	0.2° x 0.4° at 1MHz 0.45° x 0.9° at 450kHz 1° x 2° at 200kHz 2° x 4° at 100kHz	0.2° x 0.2° at 1MHz 0.45° x 0.45° at 450kHz 1° x 1° at 200kHz 2° x 2° at 100kHz
<i>Sounding Depth</i>	Up to 500m	Up to 700m	Up to 1000m
<i>Immersion Depth</i>	100m Standard / 6000m Option		
<i>Selectable Freq</i>	100kHz - 1MHz		
<i>Selectable Swath</i>	10° to 160° - User selectable in real time		
<i>Embedded INS/GNSS</i>	100m immersion depth rated		
<i>INS Accuracy (with RTK)</i>	<i>Roll &amp; Pitch:</i> 0.015° <i>Heading:</i> 0.015° with 4m antenna baseline, 0.03° with 2m antenna baseline <i>Heave:</i> 5cm or 5% in real-time, 2cm or 2% delayed heave <i>Position:</i> Horizontal: 1cm + 0.5 ppm, Vertical: 1.5cm + 1 ppm		

ELECTRICAL

<i>Mains</i>	90-260V AC, 45-65Hz, or 10-55V DC		
<i>Power Consumption</i>	40W	60W	150W
<i>Uplink/Downlink</i>	10/100/1000Base-T Ethernet		
<i>Sync In, Sync Out</i>	TTL		
<i>Deck Cable Length</i>	15m Standard / 25m and 50m Options		

PHYSICAL

<i>Receiver Dimensions (LWD) &amp; Mass (kg)</i>	264 x 110.1 x 63mm ± 4kg	456 x 102.6 x 63mm ± 7kg	
<i>Projector Dimensions (LWD) &amp; Mass (kg)</i>	288 x 126 x 164mm ± 12kg		480 x 126 x 164mm ± 17kg
<i>VOX-IM Interface Module Dimensions (LWD) &amp; Mass (kg)</i>	212 x 160 x 70.5mm 2.9kg		

THE ONLY MA3 MULTI-ASPECT™ SURVEY SYSTEM



BROUGHT TO YOU BY



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