

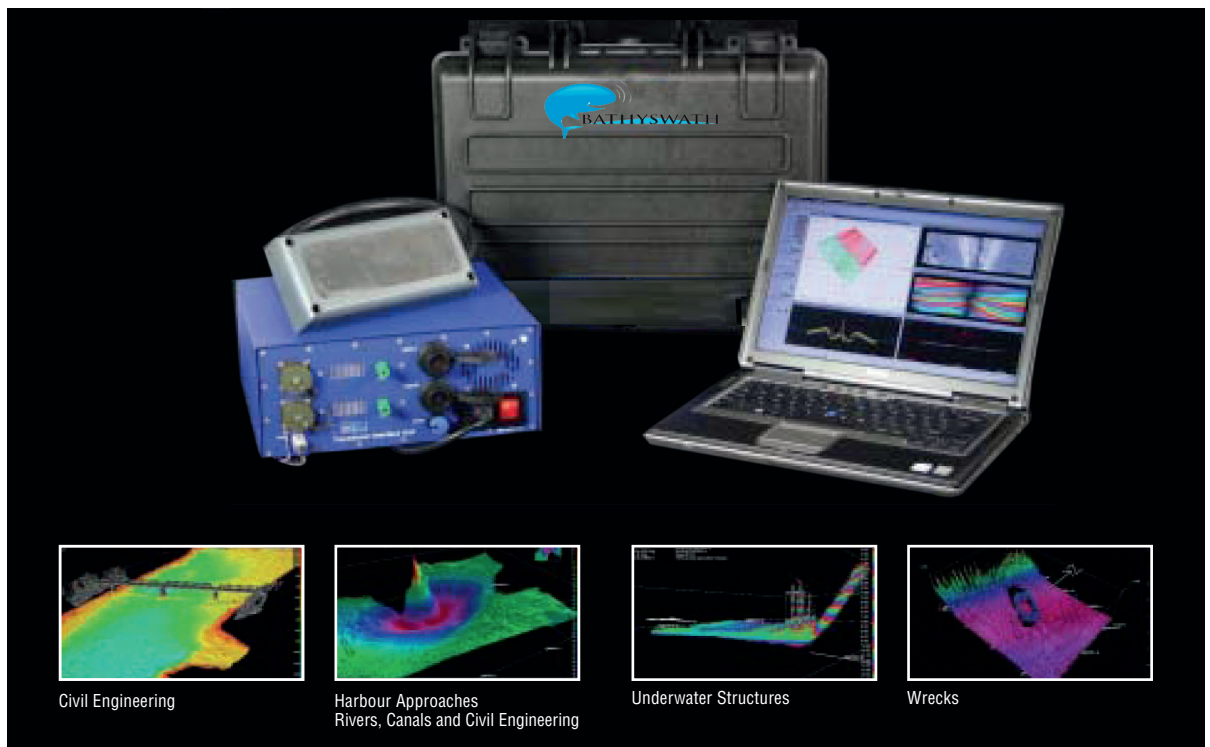


**CODEVINTEC**

Tecnologie per le Scienze della Terra

45° 27' 39.384" N  
9° 07' 30.145" E

## BathySwath Interferometric Multibeam



The shallow water sonar  
of choice for collecting  
very wide swath,  
high-resolution bathymetry  
and sidescan data.

### Why BathySwath?

- > Wide swath even in very shallow waters:  
"Operating swath of the bathymetric system  
ranged from 15 to 20 times water depth  
in depths less than 15 m."  
U.S. Geological Survey (USGS), BathySwath user
- > High resolution up to the swath edge
- > Compact, robust, easy and rapid to deploy
- > High-quality, high-resolution co-registered sidescan



## BathySwath Interferometric Multibeam

### Main system components

- > Pair of sonar transducers
- > Transducer Interface Unit (TIU)
- > Laptop computer
- > Sonar control and data analysis software
- > Universal mounting kit

### Interferometry and Multibeam: a comparison

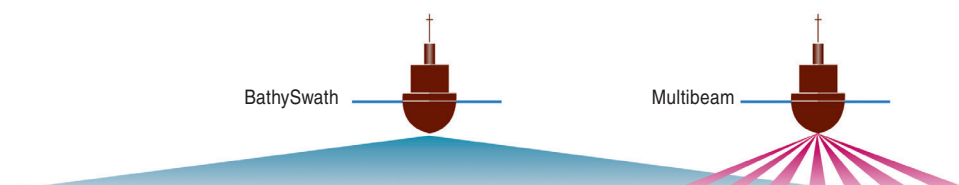
- > Lower cost of ownership – compared with beamforming multibeam
- > Higher resolution
- > Swath width insensitive to roll so suitable for small vessels
- > Greater swath width, therefore faster seabed coverage

### System Features

- > Available in 3 operating frequencies: 117 kHz, 234 kHz and 468 kHz
- > 468 kHz available as AUV/ROV/ASV options
- > Double-sided pinging
- > USB Interface to any modern laptop or computer
- > Wide swath to depth ratio on average 10:1
- > Compact and portable: easy, rapid deployment on vessels of opportunity
- > Interface with real-time applications including: Qinsy, Hypack and PDS2000
- > Ease of use by operators: reduced training, low cost of ownership

### Benefits

- > Co-registered bathymetry and sidescan of high quality
- > Lightweight, compact and highly portable
- > Easy to deploy and use – even with limited or basic knowledge
- > Highly efficient – fast survey times and turn around
- > Cost-effective with low cost of ownership
- > Data is simple to interpret and fast to process
- > High quality results compatible with IHO S-44 standard
- > Data exported to industry standard applications such as CARIS



### Performance Parameters

|                              | BathySwath-L  | BathySwath-M   | BathySwath-H   |
|------------------------------|---|----------------|----------------|
| <b>Sonar Frequency</b>       | 117 kHz   | 234 kHz        | 468 kHz        |
| <b>Recommended Depth to*</b> | 300 m / 984 ft  | 100 m / 328 ft | 50 m / 164 ft  |
| <b>Maximum Swath Width*</b>  | 600 m / 1969 ft   | 300 m / 984 ft | 150 m / 492 ft |
| <b>Swath Width*</b>          | Up to 15 times depth, up to maximum swath width (typically 7-12 times, depending on water conditions and bottom type) |                |                |

\*Parameters are given for guidance only and may vary according to survey conditions. All specifications subject to change without notice.

### Dimensions

| Transducer                       | Height: mm / ins | Width: mm / ins | Depth: mm / ins | Weight in air: kg / lbs | Weight in water: kg / lbs |
|----------------------------------|------------------|-----------------|-----------------|-------------------------|---------------------------|
| <b>BathySwath-L</b>              | 235 / 9.3        | 550 / 21.6      | 90 / 3.5        | 13 / 28.7               | 1.6 / 3.6                 |
| <b>BathySwath-M</b>              | 160 / 6.3        | 350 / 13.8      | 60 / 2.4        | 6 / 13.2                | 0.9 / 2.0                 |
| <b>BathySwath-H</b>              | 100 / 3.9        | 215 / 8.5       | 42 / 1.7        | 1 / 2.2                 | 0.1 / 0.2                 |
| <b>Transducer Interface Unit</b> | 125 / 4.9        | 294 / 11.6      | 285 / 11.2      | 6.4 / 14.1              | - / -                     |

