

**B3S-B "all-in-one" system**

*(Embedded SVS, GNSS board, INS and sonar electronics)*

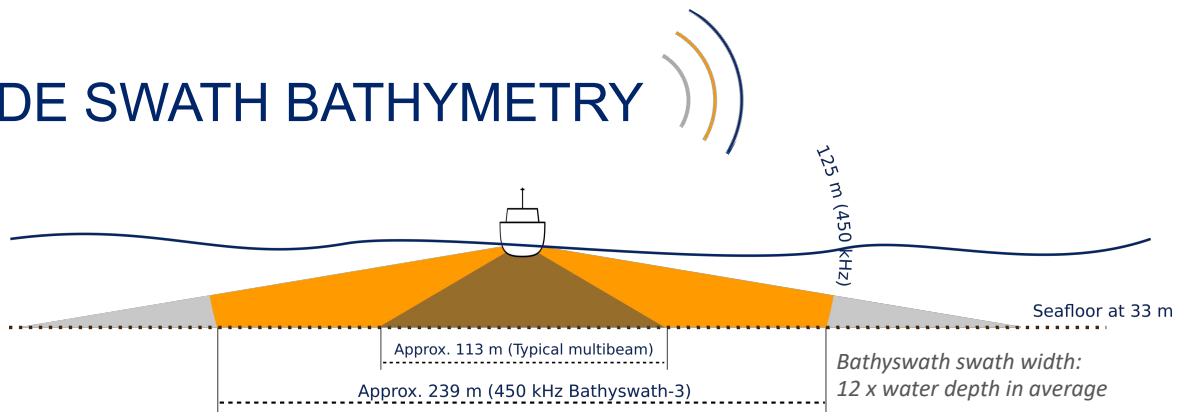


**B3S-A "sonar only" system**

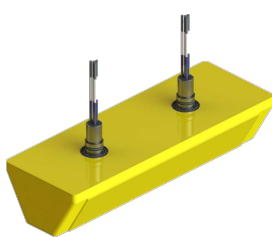
# Bathyswath-3 SIGMA (B3S)

The innovative Bathyswath-3 technology embedded in SIGMA subsea unit

# WIDE SWATH BATHYMETRY

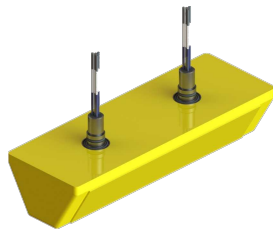


# 4 POD TRANSDUCERS POSSIBILITIES



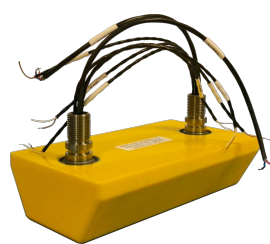
## 250 kHz

- Single frequency
- 2.0 kg, 31.6x11x6.8cm
- Permanent stock (Apr. 24)



## 250 - 850 kHz

- Dual frequency
- 2.1 kg, 31.6x11x6.8cm
- Permanent stock (Nov. 24)



## 450 kHz

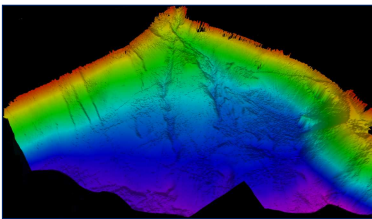
- Single frequency
- 1.3kg, 20x11x5cm
- Permanent stock



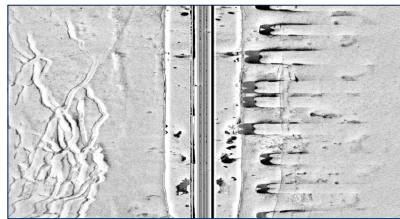
## 450 - 1200 kHz

- Dual frequency
- 1.5 kg, 20x11x7cm
- On demand only

# 2 TYPES OF DATA



3D Bathymetric data (xyz)

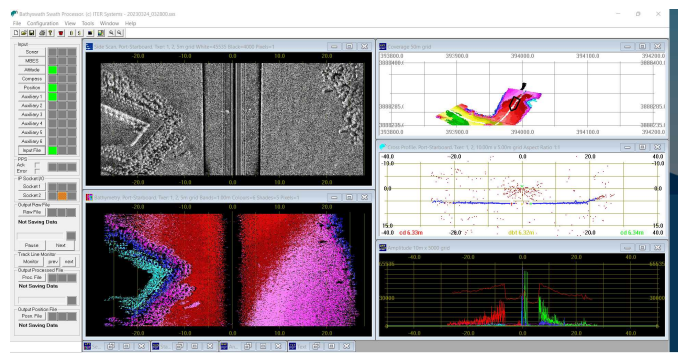


Sidescan images

# SOFTWARE INCLUDED IN THE PACKAGE

## Software, 3D bathymetry & sidescan data

- Fully-functional survey software (for sonar, position, sound velocity and motion data acquisition) and post-processing software (for 3D rendering and digital terrain models),
- Bathyswath sonar is also compatible with most usual commercial software packages.



# EMBEDDED OPTIONAL DEVICES<sup>(1)</sup>

## Combined GNSS/INS positioning & motion solutions



**Quanta Plus**  
(SBG Systems)  
- Septentrio GNSS (w/ PPP)  
- Advanced INS



**Certus EVO**  
(Advanced Navigation)  
- Trimble BD992 GNSS  
- Advanced INS

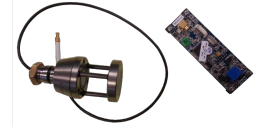


**BD 992-INS<sup>(2)</sup>**  
(Trimble)  
- Trimble BD992 GNSS  
- Basic INS



**Quanta Micro<sup>(2)</sup>**  
(SBG Systems)  
- U-blox GNSS w/o PPP  
- Basic INS

## Sound Velocity sensor



**MiniSVS<sup>(3)</sup>**  
(Valeport)

(1) : Click on the image (pdf brochure) for a direct link to the technical specifications

(2) : Not adapted for surveys in rough waters

(3) : A SVS is advised for improving survey quality but is not mandatory unlike the Sound Velocity Profiler (SVP)

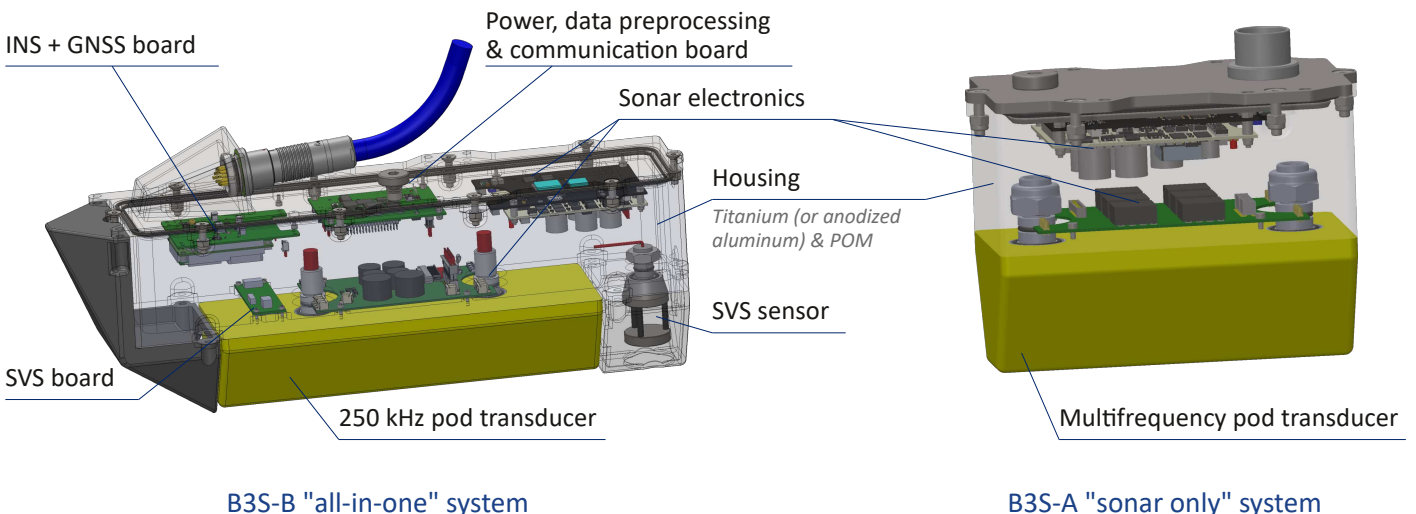
# TECHNICAL SPECIFICATIONS

	Single frequency <sup>(1)</sup>	Single frequency	Dual frequency <sup>(1)</sup>	Dual frequency
<b>Frequencies</b>	<b>250 kHz</b>	<b>450 kHz</b>	<b>250-850 kHz</b>	<b>450-1200 kHz</b>
Operational slant range (m)	> 200	> 125	>200 <sub>(250 kHz)</sub> > 70 <sub>(850 kHz)</sub>	>125 <sub>(450 kHz)</sub> > 20 <sub>(1200 kHz)</sub>
Horizontal beam width (two-way)	0.55°	0.55°	0.55°	0.55°
Spatial resolution limit (mm)	2.9	1.5	1.0 @ 850 kHz	0.7 @ 1200 kHz

(1) : Can be installed on B3S-B housings only

- B3S-B overall dimensions (incl. front fairing) : 525 (L) x 138 (W) x 224 (H) mm - Weight is about **7 kg** only in the air depending on transducers.
- B3S-A overall dimensions : 525 (L) x 138 (W) x 224 (H) mm
- Housing pressure depth rating : 10 m
- Wideband (chirp) sonar technology
- Low power consumption

# PARTS BREAKDOWN



## OTHER PACKAGE OPTIONS



### Bathyswath-3 OEM

Sonar electronics and transducers as parts for integration inside clients' systems or vehicles (i.e. AUVs, USVs, etc.).

## FROM A TO Z



Sonar systems engineering.



Training on client's site or on lake in front of our premises.



Software development for our own products or for new interfaces with customers systems.



Remote technical support.

## MOST OF OUR CUSTOMERS ARE



Marine services



Research



Natural resources



Archeology

### Bathyswath a brand of the company ITER Systems

ITER Systems is one of the world's most experienced team of developers of interferometric sonars. Its products are direct descendants of the world's first commercially available interferometric swath sonar system. ITER Systems provides innovation and quality products at an affordable price.

#### ITER Systems

3 rue du lac du Mont Cenis  
Savoie Technolac  
73290 La Motte-Servolex, France  
Phone : + 33 972 457 330  
sales@iter-systems.com  
www.iter-systems.com

