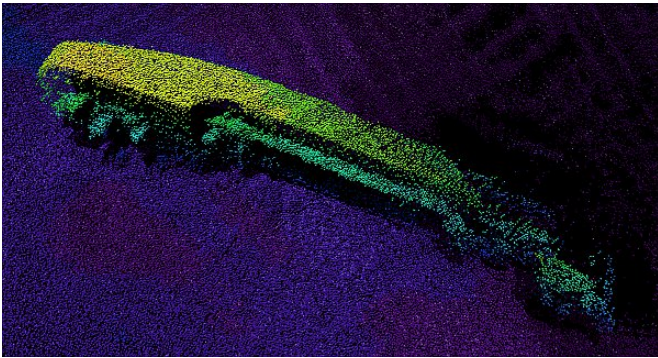


Gemini 620pd

Multibeam Profiling Sonar



Gemini sonar image as post-processed in Hypack®.

Operating at 620kHz the Gemini 620pd can provide 10mm range resolution results with an angular resolution of 1° over a maximum swathe of 130°.

The software package supplied with the Gemini 620pd has been designed to provide the user with the ability to easily and effectively optimise the performance of the system.

Automatic bottom tracking, variable gate setting, gate tilting as well as roll compensation are some of the automated features that ensure a survey can be completed, with minimal user interaction during operation.

Users have the option to run the system in equidistant or equiangular mode, depending on the type of survey being undertaken and the primary area of interest.

A Gemini Hub is used to connect up to 2 Gemini 620pd heads. This Gemini Hub is connected to a PC or laptop and ensures all of the data from the other sensors (i.e., GPS, Gyro, MRU and SVS) are accurately synchronised for final post processing.

High resolution echo sounder from the Gemini range of multibeam

The Gemini 620pd benefits from the latest technological advances in signal processing.

These advances allow the 620pd to produce high performance bathymetry data, which is in turn output to industry standard survey packages for processing.

Benefits

- High resolution performance
- 130° swathe
- 4000m titanium housing
- Ease of installation

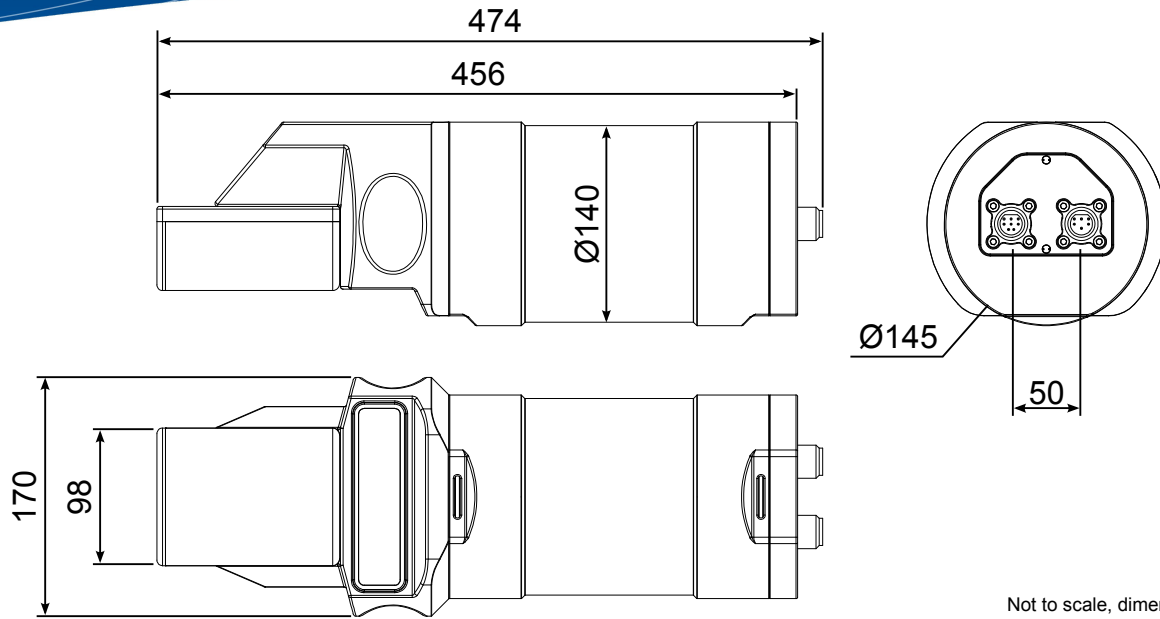
Features

- Ethernet and VDSL communications
- Compatible with industry survey packages
- Automatic bottom tracking
- Roll correction

Applications

- Oceanographic surveys
- Bathymetric surveys
- Pipeline/trench surveying
- Dredging and rock-dump surveys

Specification



Not to scale, dimensions in mm.

Acoustic Specifications	
Operating Frequency	620kHz
Angular Resolution	1.0° acoustic, 0.5° effective
Swathe	130°
Number of Beams	256
Vertical Beamwidth	1°
Range	0.5 to 120m
Update Rate	5 – 50Hz (range dependent)
Range Resolution	10mm (range dependent)
Pulse Length	25 – 200µs (range dependent)
Interface	
Power Consumption	37W maximum (range dependent, head unit only)
Supply Voltage	22 – 75V DC
Communications Protocols	Ethernet (up to 80m) or VDSL (up to 1000m)
Connector Type	Burton 5506 Series
VDSL cable length	Maximum length for VDSL and power is 300m, if power is provided locally (e.g., by the ROV), then cable length for VDSL communications is 1000m.
Physical Specifications	
Weight	19kg air, 13kg water
Depth Rating	4000m
Material	Titanium (6 AL-4V)
Finish	Bead blasted
Temperature Range	-10 to 35°C (-20 to 50°C in storage)

Specifications subject to change according to a policy of continual development.

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