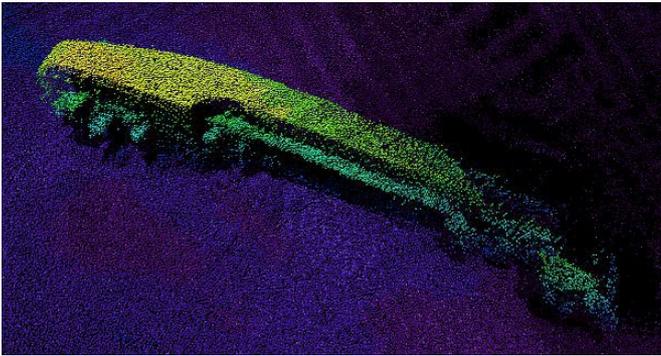


# Gemini 620pd

## 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.

The automatic bottom tracking and roll compensation features ensure a survey can be completed with minimal user interaction during operation. Variable gate settings and user selectable ping rate give the operator enhanced data control.

Users can choose from a selection of beam patterns, allowing the 620pd to be used in a wide variety of survey applications.

A Gemini Hub enables the user to connect up to 2 Gemini 620pd heads. The Gemini Hub is connected to a PC or laptop and ensures data from other survey sensors (i.e. GPS, Gyro, MRU and SVS) is accurately synchronised.

### 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 that is compatible with industry standard survey packages for processing.

Designed for Remotely Operated Vehicles (ROV) mounting, the Gemini 620pd is manufactured in titanium and rated to an operational depth of 4000m.

#### Benefits

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

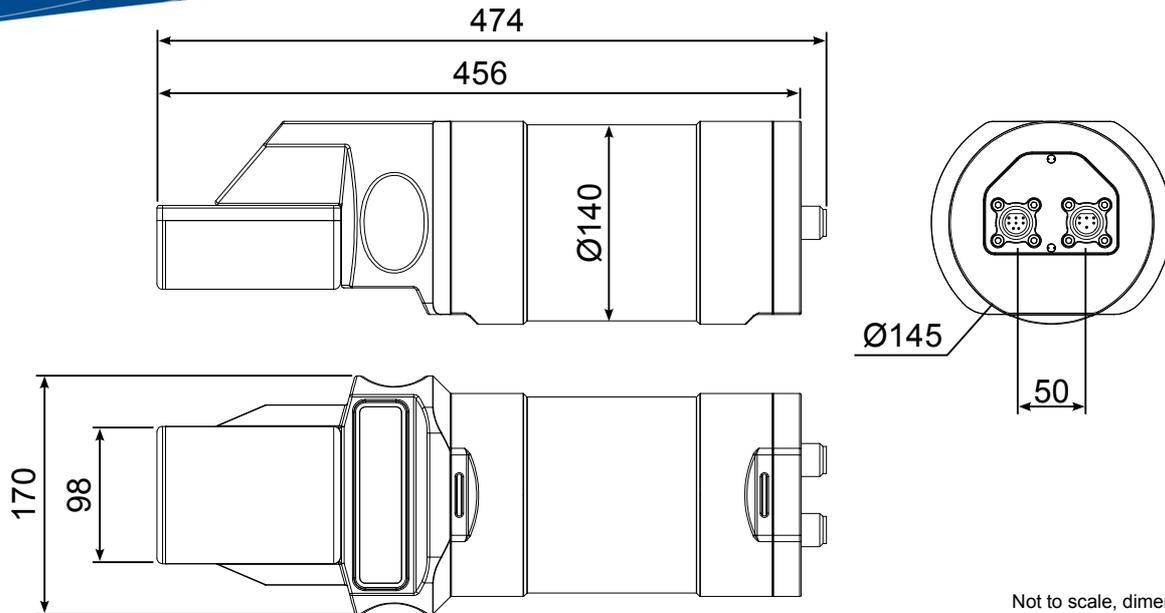
#### Features

- 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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