



# Gemini 720i Multibeam Sonar

## Benefits

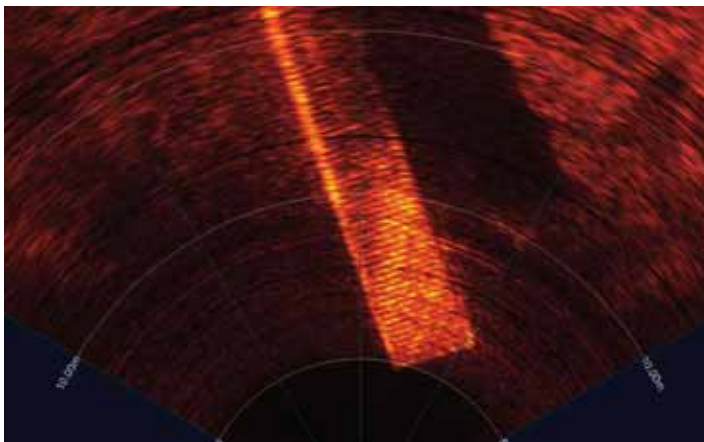
- Compact real-time imaging sonar
- Large 120° field of view
- Integrated velocimeter for accurate ranging
- 120m range
- Flexible interfacing for ROVs / AUVs
- Software Development Kit available

## Applications

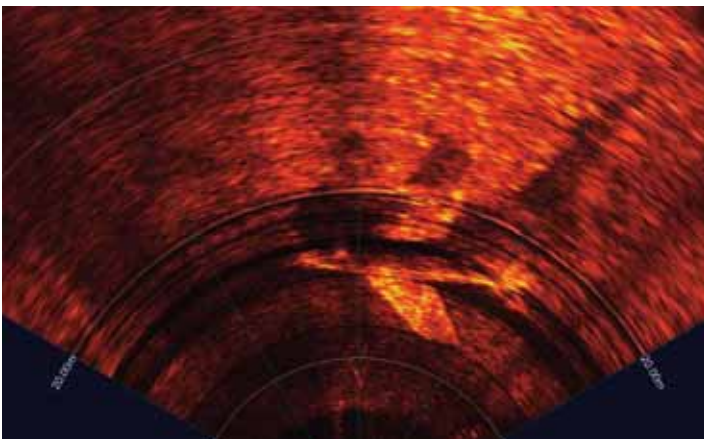
- ROV / AUV navigation
- Obstacle avoidance
- Target recognition
- Search and salvage
- Subsea monitoring & inspection



Gemini 720i Sonar



Gemini 720i Sonar image of a submerged container



Gemini 720i Sonar image of a submerged aircraft

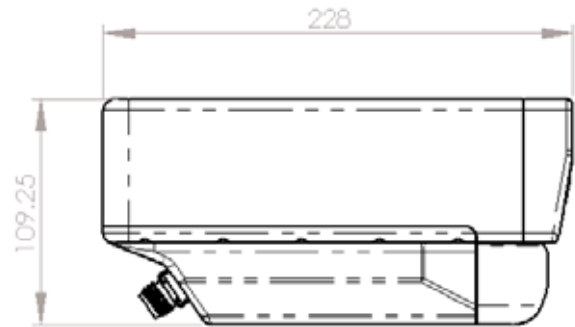
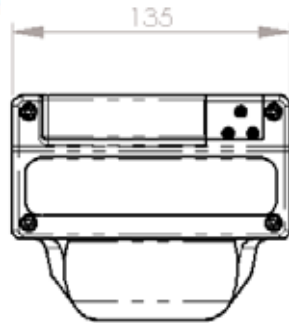
Gemini 720i sets new standards for multibeam imaging sonars. It offers a compact real-time high frequency imaging solution, which is suitable even for very small ROVs and AUVs. The sonar head weighs just over 1kg in water and is designed to be easily installed onto a variety of underwater vehicles and platforms.

With a 720kHz operating frequency, and state of the art processing electronics, Gemini 720i produces images of superb clarity with the added benefit of real-time imaging. An integrated sound velocity sensor assists in providing the sharpest image possible, with accurate ranging.

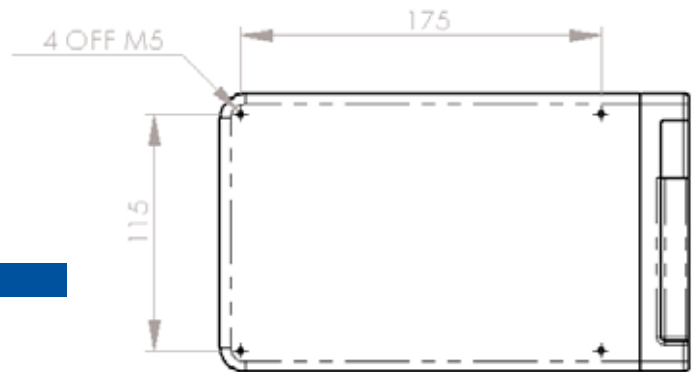
The sonar has a horizontal coverage of 120°, giving the operator a very impressive field of view. Gemini 720i may be interfaced via Ethernet or, for vehicles without fibre optics, through an integrated VDSL connection. At the surface, data from Gemini 720i can be displayed using Tritech's intuitive Seonet Pro, or Gemini's standalone software. A software development kit is also available for autonomous vehicle operations.



### Specifications



All dimensions are in mm



#### SPECIFICATION

Operating Frequency	720kHz
Acoustic Angular Resolution	1.0°
Scanning Sector	120°
Number of Beams	256
Effective Angular Resolution	0.5°
Vertical Beamwidth	20°
Range	From 0.2m (0.7ft) to 120m (395ft)
Scan Rate	10-30Hz (range dependent)
Range Resolution	8mm (0.3") (user selectable)

#### INTERFACE

Power Consumption	35W
Supply Voltage	18 - 75V DC
Comms	Ethernet (10/100 BaseT) or VDSL (with Ethernet 1000 BaseT available)

#### MECHANICAL

Depth Rating	300m (984ft)
Weight in air	3.9Kg (8.82lb)
Weight in water	1.2Kg (2.65lb)
Width	135mm (5.31")
Height	110mm (4.33")
Depth	228mm (8.98")

All specifications are subject to change in line with Tritech's policy of continual product development.

Ref: EDS-MLT-002.0



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