



# Gemini 720i

## MULTIBEAM IMAGING SONAR

### Benefits

- Provides crisp, clear, wide angle field of view in low visibility environments
- Real-time imagery increases target acquisition and aids in navigation
- Easier interpretation of sonar imagery and identification of targets at a longer range
- Lightweight, compact, robust design for ease of vehicle mounting
- Flexible interfacing for ROVs/ AUVs

### Features

- 720kHz operating frequency
- 120° field of view
- Integrated velocimeter for accurate ranging
- Weighs only 1.2kg in water
- Interfaced with either Ethernet or VDSL
- Display data via Tritech's SeaNet Pro or Gemini's standalone software
- Software Development Kit available

### Applications

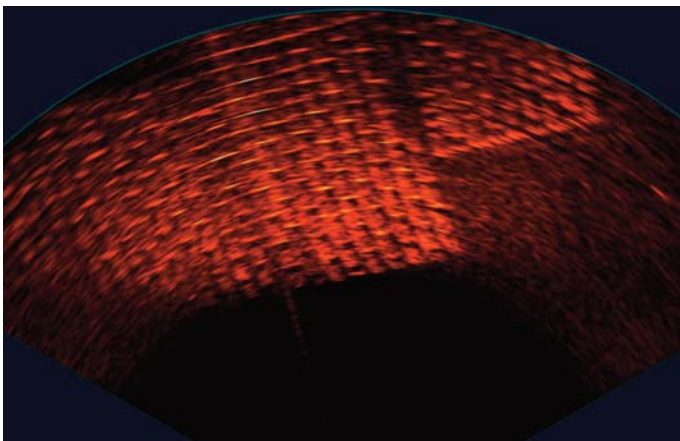
- ROV / AUV navigation
- Search & Rescue
- Obstacle avoidance
- Target recognition
- Salvage operations
- Subsea monitoring & inspection

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.

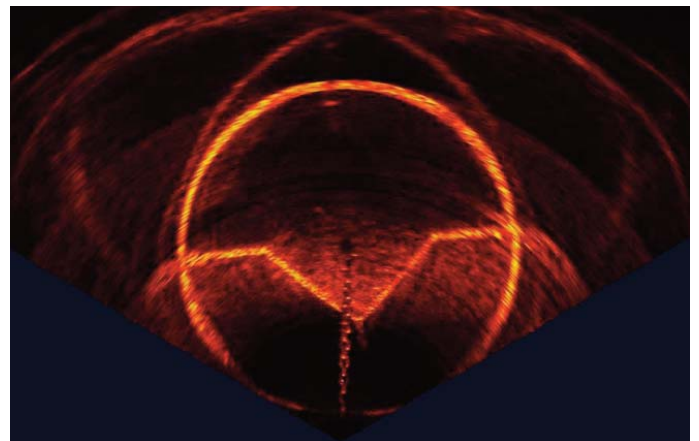
With a 720kHz operating frequency, and state of the art processing electronics, Gemini 720i produces images of superb clarity with the added benefit of real-time imaging. An integrated sound velocity sensor assists in providing the sharpest image possible, with accurate ranging.



Gemini 720i Sonar



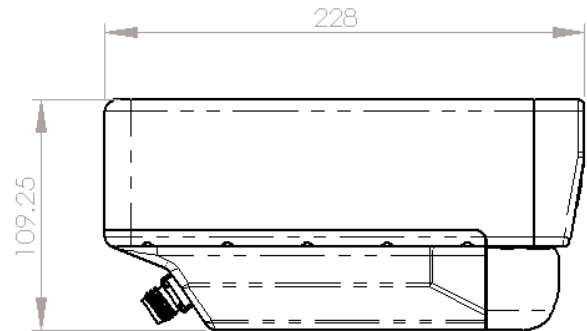
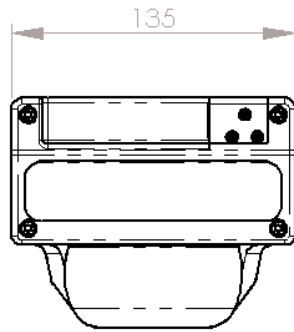
Gemini 720i sonar image of a pipeline mattress



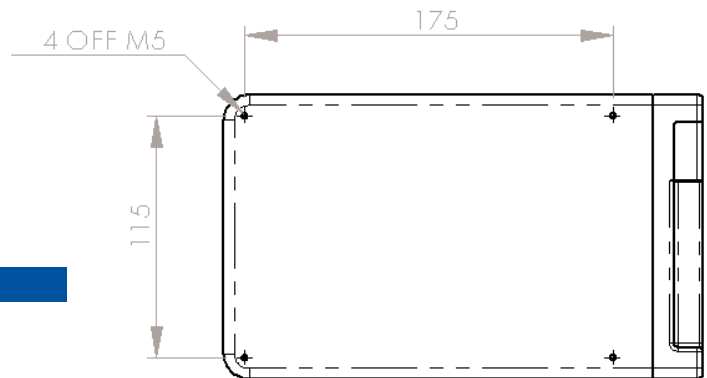
Gemini 720i sonar image of a mooring block



### 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	6 - 30 Hz (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-002.2

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