

Gemini 720is

Wet Pluggable -5°, 10° and 20°

Designed for extended deployment.

The Gemini 720is is the latest generation from Tritech's renowned multibeam sonar range and is now available with an enhanced range of vertical beam widths to include 5° and 10° in addition to the existing 20° width.

A real-time, high frequency imaging solution, the Gemini 720is operates at 720kHz and combined with Tritech's advanced processing electronics, it produces images of outstanding clarity benefitting from 512 beams, resulting in a 0.5° effective angular resolution.

The latest Gemini 720is has been developed specifically for long-term deployments, fitted with an underwater pluggable connector with titanium housing. The underwater pluggable connector allows the sonar to be removed and reinstalled subsea with no need to bring the cable end to the surface.

The Gemini 720is is supplied with Genesis, Tritech's data acquisition and logging software, which offers users the ability to network and operate the sonar along with a range of other Tritech sensors, from a single software interface.

The capability to record data in a range of digital video formats and output screen. shots for review comes as standard.



Benefits

- Near field focusing
- 720 kHz operating frequency
- 8 mm / 0.3 in range
- Clear wide angle field of view
- Suitable for low visibility environments
- Easier interpretation of sonar imagery

Features

- Underwater pluggable connector
- CHIRP processing
- Wide 120° field of view
- Real-time updates for video like imagery
- Integrated velocimeter for accurate ranging

Key Specification	
Operating frequency	720 kHz
Angular resolution	1.0° acoustic, 0.25° effective
Range	0.2 m - 120 m / 5 in - 394 ft
Depth rating	4000 m / 13123 ft
Supply Voltage	19 to 74 VDC
Power Requirements	16 - 27 W (range dependent) ¹
Main Port Protocol	Ethernet or VDSL
Weight in air	5.00 kg / 11.02 lbs
Weight in water	3.00 kg / 6.61 lbs

Acoustic specifications

Operating frequency	720 kHz
Angular resolution	1.0° acoustic, 0.25° effective
Range	0.2 m - 120 m / 5 in - 394 ft
Number of beams	512
Horizontal beam width	120°
Vertical beam width	5° ± 2.5° to Horizontal / 10° ± 5° to Horizontal / 20° (20° tilt down)
Range resolution	4 mm / 0.2 in
Update rate	5 - 40 Hz (range dependent)
Mode of operation	CHIRP and CW
Speed of sound	Integrated Velocity of Sound sensor for accuracy

Interface

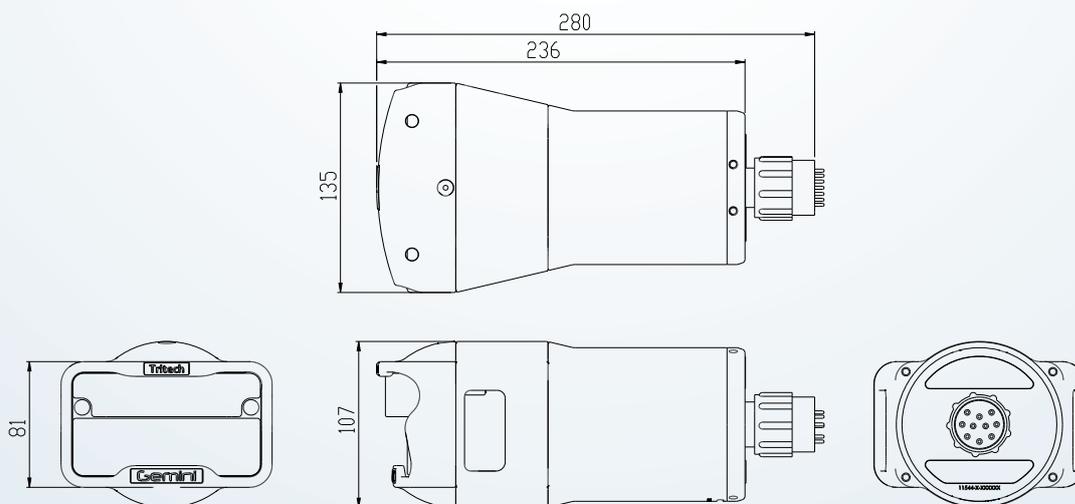
Supply voltage	19 to 74 VDC
Power requirement	16 - 27 W (range dependent) ¹
Main port protocol	Ethernet or VDSL
Connector type	Subconn BH10M

Physical specification

Depth rating	4000 m / 13123 ft
Weight in air	5.00 kg / 11.02 lbs
Weight in water	3.00 kg / 6.61 lbs
Temperature rating (operating)	-10 °C to 35 °C / 14 °F to 95 °F
Temperature rating (storage)	-20 °C to 50 °C / 4 °F to 122 °F

Specification subject to change in line with Tritech's policy of continual product development.

¹ The power consumption range quoted is accurate for a standalone unit and ignores cable losses.



Not to scale. Measurements in mm