

# MICRON GEMINI MULTIBEAM SONAR

SKU: TRI-MICRON-GEM

The Micron Gemini fuses Tritech's Gemini multibeam technology with Tritech's Micron technology to create the world's smallest multibeam imaging sonar. It has a 90° horizontal field of view and a range of 50m. It has a speed of up to 20Hz, which makes it capable of recreating environments in real-time. Another advantage of this sonar is the compact size and light weight which does not affect the driving characteristics of the ROV.



**Supplier:** Tritech International Ltd

## TECHNICAL SPECIFICATIONS

### Acoustic Specifications

<b>Operating frequency</b>	720 kHz
<b>Angular resolution</b>	2.34° acoustic, 0.7° effective
<b>Range</b>	0.2 m to 50 m
<b>Number of beams</b>	128
<b>Horizontal beam width</b>	90°
<b>Vertical beam width</b>	20° (±10° about horizontal axis)
<b>Update rate (typical operation)</b>	3 to 20 Hz (range dependent)
<b>Range resolution</b>	8 mm
<b>Mode of operation</b>	CW or CHIRP
<b>Speed of Sound</b>	Adaptive beamforming based on the user-specified speed of sound

### Integrated Sensors

<b>Depth</b>	Integrated pressure sensor
<b>Temperature</b>	Integrated temperature sensor
<b>Attitude and Heading</b>	AHRS sensor

**Interface specifications**

<b>Supply voltage</b>	12 to 48 V DC
<b>Power requirement</b>	4.5 to 17 W (7.5 W average)
<b>Main port protocol</b>	Ethernet (100 Base-T)
<b>Connector type</b>	Blueye Smart Connector

**Physical specification**

<b>Depth rating</b>	300 m or 750 m
<b>Weight in air</b>	0.429 kg
<b>Weight in water</b>	0.240 kg
<b>Operating temperature</b>	-10 to +35°C
<b>Storage temperature</b>	-20 to +50°C