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

Compatibility

Compatible ROV models	X3, X3 Ultra, X7

Acoustic Specifications

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

Integrated Sensors

Depth	Integrated pressure sensor
Temperature	Integrated temperature sensor
Attitude and Heading	AHRS sensor

Interface specifications

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

Physical specification

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