

# Gemini Imaging Sonars

## Comparison sheet

Tritech has a range of Multibeam imaging sonars which can be used for shallow water operations and also deep water operations. The Gemini sonars are suitable for integration onto ROVs, AUVs, Vessel/Pole mounted and Diver Navigation Platforms.



Micron Gemini

Shallow water navigation and obstacle avoidance.



Gemini 720ik

Shallow water navigation, obstacle avoidance and target inspection.



Gemini 1200ik

Shallow water navigation, obstacle avoidance and high resolution target inspection.



Gemini 720is

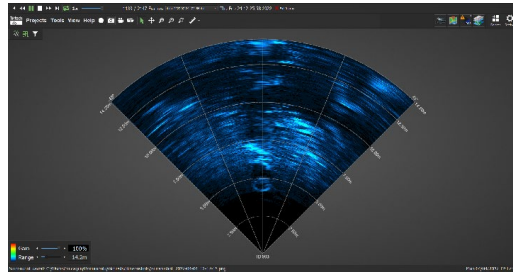
Deep water navigation, obstacle avoidance and target inspection.

Specification	Micron Gemini	Gemini 720ik	Gemini 1200ik		Gemini 720is	
Operating frequency	720kHz	720kHz	720kHz	1200kHz	720kHz	
Horizontal beamwidth	90°	120°	120°		120°	
Vertical beamwidth	20°	20°	20°	12°	20°	
Effective angular resolution	0.7°	0.25°	0.25°	0.12°	0.25°	
Maximum range	50m	120m	120m	50m	120m	
Range resolution	8mm	4mm	4mm	2.4mm	4mm	
Minimum range	0.2m	0.2m	0.1m		0.2m	
Supply voltage	12 to 48V DC	19V to 74V DC	19V to 74V DC		19V to 74V DC	
Comms	Ethernet Serial (RS232 / RS485)	Ethernet	Ethernet		Ethernet VDSL	
Material	Aluminium	Aluminium	Aluminium		Alu	Titanium
Depth rating	300m or 750m	350m	350m		1000m	4000m
Weight in air	0.43kg	1.40kg	1.47kg		3.4kg	5.0kg
Weight in water	0.24kg	0.43kg	0.50kg		1.3kg	3.0kg
Temperature rating	-10 °C to 35 °C (operating), -20 °C to 50 °C (storage)					

# Underwater Targets and Identification



Micron Gemini



Approx target range = 7.5m

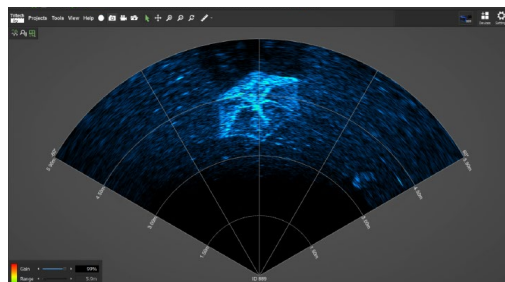
Tyres on seabed



Approx target size: 2m x 2m x 4m



Gemini 720ik



Approx target range = 4.5m

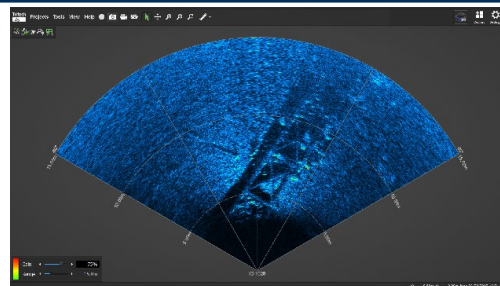
Umbrella



Approx target size: 1.5m x 1.5 x 2m

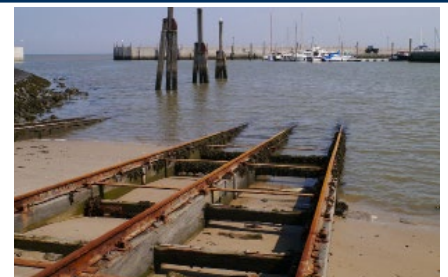


Gemini 1200ik



Approx target range = 10m

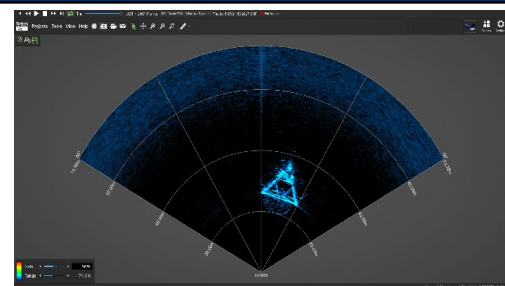
Steamboat Railings



Approx target size: 3m x 0.5m x 50m



Gemini 720is



Approx target range = 30m

Offshore Wind Turbine



Approx target size: 10m x 10m x 10m