

Gemini NBI

Narrow beam imaging



The Gemini NBI uses a narrow 1° vertical beam for precise target identification, offering sharp sonar images at a 620 kHz frequency. With 10mm range resolution and 0.5° horizontal angular resolution, it excels at monitoring position relative to known targets.

Operating with a 130° sector scan and up to 30 scans per second, the NBI's high refresh rate and wide-angle imaging make it ideal for maneuvering in poor visibility.

The system supports Ethernet or VDSL communication, enabling compatibility with deep and shallow water systems. The Gemini NBI software can run on the Tritech Surface Control Unit or a customer laptop.

Specifications

Product	Gemini NBIr narrow beam imaging
Country of origin	UK
Manufacturer	Tritech International Limited
Material	Titanium (6 AL-4V)

Benefits

- High speed updates
- 4000m titanium housing
- Solid-state design reliability
- Easy to use software package

Features

- Ethernet or VDSL communication
- 130° swath
- 1° vertical beam
- 0.5° effective angular resolution

Specifications

Operating frequency	620kHz
Angular resolution	1.0° acoustic, 0.5° effective
Range	0.5 to 120m
Supply voltage	22 - 75V DC
Power requirement	37W max (range dependent, head unit only)
Main port protocol	Ethernet (up to 80m / 263ft) or VDSL (up to 500m / 1641ft)
Depth rating	4000m
Weight in water	9.50kg
Scanning sector	130°
Number of beams	256
Vertical beamwidth	1°
Scan rate	5 - 30Hz (range dependent)
Range resolution	10mm / 0.40in (range dependent)

Electrical and communications

Supply voltage	22 - 75V DC
Power requirement	37W max (range dependent, head unit only)
Data communications	Ethernet (up to 80m / 263ft) or VDSL (up to 500m / 1641ft)
Connector type	Burton 5506 series
VDSL cable length	Maximum length for VDSL and power is 300m, if power is provided locally the maximum length for VDSL communication is 500m / 1641ft

