



PICO MBES-120

PicoMB is a small beam-forming bathymetric sonar. It forms a fan of beams extending from the sonar head, and measures the distance to the seabed (or other hard objects) in each beam. PicoMB integrates an Applanix POS MV® GNSS and IMU. PicoMB-120 is a small, low-power, low-cost multibeam echosounder, developed by Picotech.

Ltd. PicoMB-120 has a wide 120° swath and is intended for bathymetric survey using 3rd party acquisition and processing software. It is small enough to fit within a USV's ADCP moon pool, but is supplied as standard with 3m length transducer cables and 6m length umbilical cable enabling it to be used on small survey vessels.

SYSTEM COMPONENTS

PicoMB consists of the following components:

- Transmit transducer
- Receive transducer
- Deck unit
- Umbilical cable
- SVS and SVS cable

The deck unit may be supplied with integrated Applanix POS MV® GNSS+IMU, or without, if the user wishes to use an external GNSS+IMU.

The Umbilical cable connects the deck unit to the user's equipment.

The systems work with the PicoSonar Windows UI and drivers for the following software have been developed:

- Xylem HYPACK®
- QPS QINSy®
- Teledyne PDS®
- EIVA NaviSuite®
- OIC GeoDAS® and SAMM®
- ITER Bathyswath®

Operational Parameters

Swath sector	120°
Beam width	1.4° x 1.4° @380kHz 1.5° x 1.5° @360kHz 1.6° x 1.6° @337kHz
Frequency	300-400 kHz
Pulse length	500µs, 5ms
Number of beams	256 spaced @ 0.47°
Maximum range	240 m
Range Resolution	37mm
Power	20 to 28 VDC, 12 W
Transducer Pressure depth	300m

