

MicroEel Data Sheet

The Geometrics MicroEel Analogue Seismic Streamer is perfectly suited to ultra-high resolution marine sub-bottom investigation projects. Manufactured from solid polyurethane the Geometrics MicroEel offers unbeatable signal clarity.



MicroEel System with Geode Seismograph. Image courtesy of Geometrics Inc.

Signals from the streamer are digitised by the renowned Geometrics Geode seismograph. The intuitive data acquisition software can be run on a standard Laptop PC. All components of the recording system can be run from 12V batteries permitting the system to be operated from any vessel.

The system is light weight and can be deployed by hand from a small vessel. The MicroEel is ideal for geological engineering projects in shallow water.

The MicroEel opens the door to affordable multichannel seismic data acquisition.

Features

- Available in 1 to 24 channel configurations
- State-of-the-art, low noise, high sensitivity polymer hydrophones provide stable, accurate response.
- 31cm bend radius winds easily on small winches.
- Extremely lightweight, deploys easily by hand,
- Proprietary floatation survives abrasive environments, proven performance in polar regions.
- Unique design isolates vibration, bulge waves and suppresses ship and towing related noise.

Product Dimensions

Physical	Dimensions (L x W x H)	Weight
(instrument only)	depended on group interval x 32mm x 32mm	0.79kg/m.

Technical Specifications

Sensor Type:	Proprietary Polymer
Frequency Response:	10 Hz to 10,000 Hz ± 1.0 dB.
Sensitivity (Nominal):	-196 dB re 1 Volt per 1 μ Pa.
Sensitivity to Acceleration:	Less than -70 dB re 1 Volt per g.
Operating Depth (Maximum):	30 $\pm$ 5 m
Preamplifier Gain:	6 dB.
Current:	11mA per channel.
Power:	± 12 V DC MicroEel Battery Pack (topside).
Channels:	12 or 24; other counts available.
Hydrophones per Group:	1 or 3; other counts available.
Group Aperture:	0 or 0.22 m; up to 1 m maximum.
Group Interval:	3.125 m or 6.25 m; other intervals available to 1 m minimum.
Active section material:	Multi-conductor with polyurethane jacket.
Bend Radius:	0.46m.
Working Load:	182kg
Breaking Strength:	909kg
Operating Range:	-10°C to +60°C
Storage Range:	-40°C to +60°C

Gallery



Hand deployment of the MicroEel off of the back deck.



Deployment of MicroEel_setting the layback.



MicroEel Analog Streamer Block Diagram

Components

-  Seismograph
-  Power Supply
-  Deck Cable (no flotation)
-  Tow (Lead) Cable (no flotation)
-  Active Section
-  Hydrophone (group or single)
-  Tail Swivel and Eye

Notes:

Standard configurations of 12 and 24 channels and three hydrophones per group, with group intervals of 3.125m and 6.25m.

Custom configurations available with 1 to 24 channels, up to 10 hydrophones per group, and group intervals to a minimum of 1m.

Maximum total length of 400m.

Drawing not to scale. Not all essential system components depicted.

Specifications subject to change without notice for product improvement/development.

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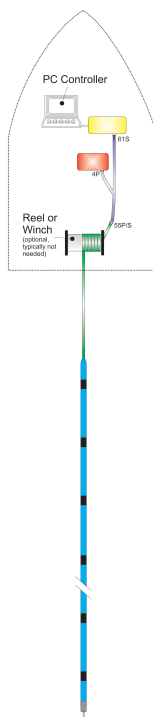


Diagram illustrating the key components which formulate a MicroEel system.