GeoSpectrum Technologies Inc
Customizing Detection

M21 Benders

HIGHLY VERSATILE UNDERWATER ACOUSTIC PROJECTOR

OVERVIEW

GeoSpectrum's M21 benders, or flexural disk transducers, are low-frequency underwater acoustic projectors that produce moderate power over a broad band and high power near resonance. M21s come in a variety of sizes serving a wide range of resonance frequencies and bandwidths.

Individual M21s can be custom designed to achieve resonance frequencies ranging from 400 Hz to 12 kHz and higher. A selection of standard M21 designs is also available.

APPLICATIONS

GeoSpectrum's benders can be used for a variety of different low-frequency applications, including, but not limited to subsea communication, long-range data transmission, and active sonar. GeoSpectrum's ability to customize both individual benders and multi-bender sources gives the M21 product family the ability to meet a wide range of requirements and applications.

SPECIFICATIONS

Model Number	Resonance Frequency (Hz)	Max Depth [m]	Weight (kg)
M21-203-500	500	80	3.2
M21-203-900	900	190	3.8
M21-203-1400	1400	400	4.6
M21-100-2000	2000	270	0.8
M21-100-3000	3000	540	0.8
M21-100-4000	4000	840	1.0
M21-100-5000	5000	1200	1.2

M21 Benders

AUXILIARY ITEMS

M320 Power Amplifier Assembly
Ideal for battery powered or remote transmit applications (includes a COTS amplifier card with custom magnetics. Step-up transformer and inductor is required)

M620 Power Amplifier
Portable high-powered amplifier in rugged case, for use in labs, underwater calibration facilities, research vessels, etc.

Bender Clamps
Designed to minimize acoustic impact on performance while providing a durable method of deployment or mounting to a sub-sea structure or vehicle.

M620
POWER AMPLIFIER

MODULAR PROJECTION SYSTEM

M21s are excellent options to be combined into multi-bender sources that are highly customizable to suit customer requirements. M21s can be used in a Modular Projector System (MPS) to produce greater power and bandwidth at even lower frequencies, or in conventional arrays to produce a directive, high-power source.

GEOSPECTRUM TECHNOLOGIES INC
geospectrum.ca | sales@geospectrum.ca
tel: +1 902.406.4111 | fax: +1 902.435.8987 | 10 Akerley Blvd, Unit 19 | Dartmouth, Nova Scotia | Canada | B3B 1J4