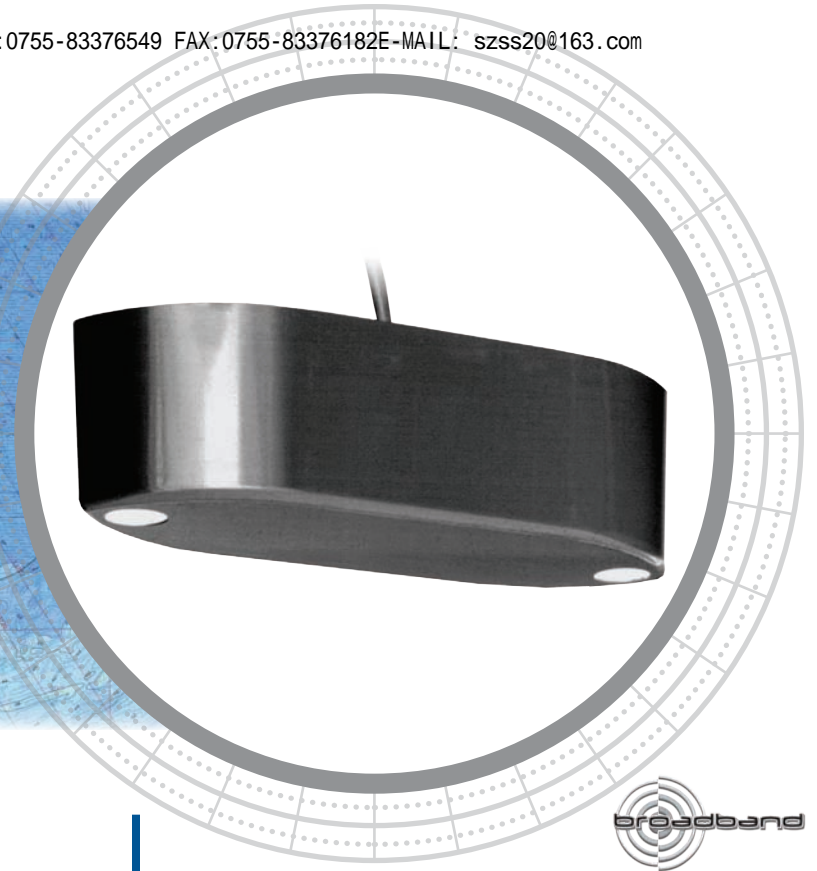


# M177



## Dual-Frequency Capability With Excellent Bottom Detail

The M177 features a wide variety of frequencies from 500 W to 2 kW. The performance options meet most survey requirements in shallow to deep water. Highly efficient, ceramic-element arrays provide excellent bottom detail.

### Options

- Impedance to customer's specifications using matching transformer
- Available as special-order unit with 28 kHz, 40 kHz, or 75 kHz array

## External-Mount 500 W - 2 kW Broadband

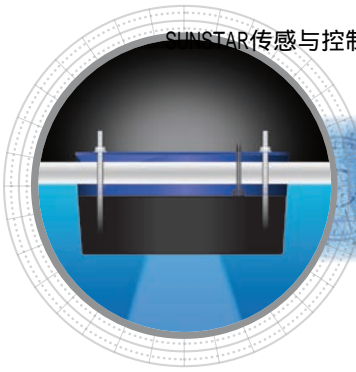
### Applications

- Shallow and deep-water survey

### Features

- Fairing vertically orients sound beam for stronger return echoes resulting in optimal, sonar performance
- Stuffing tubes are available to form a watertight conduit for cable routing and are available in a variety of materials to match all hull types
- Streamlined shape minimizes drag
- Can be mounted as an in-hull in a fiberglass hull
- Fairing is easy-to-cut and will not swell
- All mounting hardware included
- Seamless, SEALCAST™, urethane housing for long life underwater





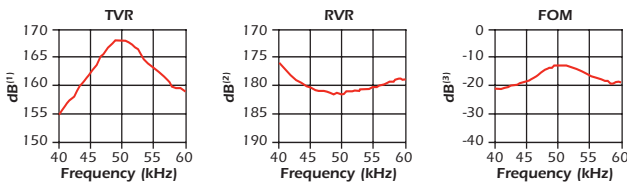
## Technical Information

Frequencies	Configuration	Beamwidth (@-3 dB)	RMS Power (W)	FOM (dB)	Q	Series Impedance (R-jX)
28 kHz-E	A	29°	1 kW	-14	9	70-j0(t)
33 kHz-E	B	23°	700 W	-13	7	70-j0(t)
38 kHz-B	C	20°	1 kW	-11	7	60-j0(t)
50 kHz-T	D	15°	1 kW	-13	8	80-j0(t)
200 kHz-S	E	4°	2 kW	-7	20	80-j40(t)
200 kHz-Slq	F	5°	2 kW	-5	6	60-j0(t)
200 kHz-BClq Broadband	G	8°	500 W	-16	2.3	60-j0(t)

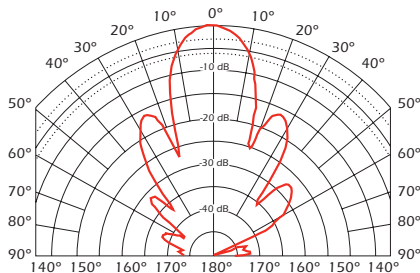
### Technical Data—50 kHz-T

TVR in dB re 1µPa/Volt at 1 m

RVR in dB re 1 Volt/µPa



### Directivity Pattern—50 kHz-T



### SPECIFICATIONS

**Weight\*:** Varies depending on configuration (Call for weight)

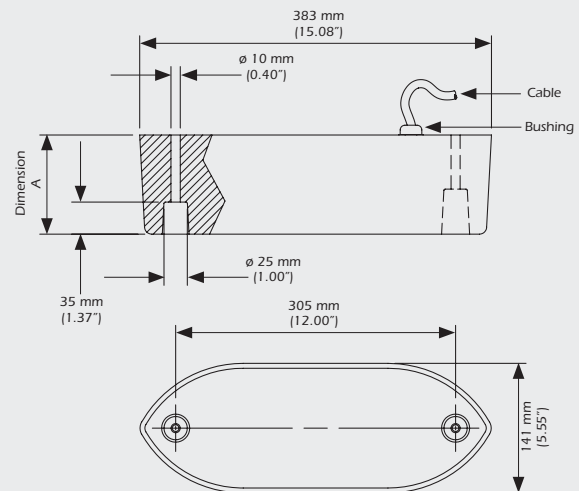
**Acoustic Window:** Urethane

**Cable Type:** C-44

Three shielded twisted pairs (two 2-18 AWG and one 2-22 AWG) with foil and braided shield overall, black TPR jacket, 11 mm (7/16") diameter

\*Without fairing and installation kit

### DIMENSIONS



Configuration	Dimension A
A	89 mm (3.50")
B	102 mm (4.00")
C, D, E, F, & G	108 mm (4.25")