

## BII-7541 Parametric Array Transducer

### Suggested Application

Sub-Bottom Investigation/Assessment/Profiler  
Sediment Profiling/Sediment Penetrating  
Detection of Buried Objects

Search Pipeline/Cable Survey  
R & D on Nonlinear Underwater Acoustics  
Low Frequency Narrow Beam Sound Sources

### Specification

Pulsed Signal	Primary Frequency (kHz)	Secondary Frequency (kHz)	Source Level (10kHz)	Penetration Capability	-3dB Beam Width	TVR dB Pa/V@1m	OCV dB V/ $\mu$ Pa	Size $\Phi$ DxH mm	Weight (kg)
Ricker, CW, Chirp/FM	180 to 210	2 to 20	>203 dB $\mu$ Pa@1m	>40 m	6°	N/A	-185	114x50	1.0

#### High Frequency Element:

$f_s=207.0\text{kHz}$ ,  $G_{max}=5.5746\text{mS}$ ,  $B=4.2554\text{mS}$  (20m shielded cable);  $Q=5.0$ .

#### Low Frequency Element:

$f_s=195.7\text{kHz}$ ,  $G_{max}=4.9945\text{mS}$ ,  $B=3.6562\text{mS}$  (20m shielded cable);  $Q=5.0$ .

Admittance:

Radiation Face:

Drive Voltage:

Duty Cycle:

Depth Rating:

Impedance Matching:

T/R Switch:

Mounting Options:

Cable Length:

Cable:

Connector:

Operating Temperature:

Storage Temperature:

Circular Plane

600Vrms Maximum.

1% at 600Vrms.

300m

Custom BII-6000: 4 to 16 $\Omega$ , 50 $\Omega$ , 60 $\Omega$ , 100 $\Omega$ ...; Not included, order separately, Append **IM** to part number

BII-2100 Transmitting & Receiving Switch; Not Included. Order Separately, Append **TR** to part number.

1. Default: Free Hanging (FH)
2. Thru-hole Mounting with Single O-ring (THSO)
3. Thru-hole Mounting with Double O-ring (THDO)
4. Bolt Fastening Mounting (Stainless Steel): (BFMSS)
5. End-face Mounting: (EFM)
6. Flange Mounting: (FGM)

1. Default: 1m
2. Custom

1. Shielded Cable (SC)
2. Wire/Cable Bundle (WCB): ONLY for Thru-hole Mounting

1. Default: Wire Leads (WL)
2. Underwater Mateable Connector (UMC)
3. MIL-5015 Style (5015)
4. Custom (custom)

-10°C to +60°C

-40°C to +60°C