

### **Applied Acoustic Engineering Ltd**

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# AA251, AA301 Boomer Seismic Sound Source



**The AA251 and AA301** boomer plates are seismic sound sources that produce a sharp repeatable pulse from a floating position on the sea surface.

The AA251, deployed on either a robust CAT100 or CAT200 catamaran, is ideal for inshore surveys from small craft.

The AA301 is designed for higher power applications and can also be used as a variable frequency boomer when combined with a CSP energy source.

### **Key Features**

- Stable pulse shape clarity with minimum reverberation
- Rugged mechanical design with weight kept to a minimum
- Supplied as individual product, or with a catamaran
- Supplied with RMK connectors and locking collars as standard
- AA251 forms part of the Inshore Boomer System, ideal for coastal surveys
- AA301 ideal for nearshore and shallow water surveys (up to 120m) depending on geology

## **Technical Specification**

### **PHYSICAL**

	Size	Weight air/water	Fixing centres	Connector
AA251 Boomer plate	380 x 380mm	18kg/10kg	315mm <sup>2</sup>	RMK 1/0
AA301 Boomer plate	620 x 520mm	25kg/14kg	485mm x 440mm	RMK 1/0

### **ELECTRICAL INPUT**

Recommended energy	AA251 AA301	50 – 200J/shot 100 – 300J/shot
Maximum energy	AA251 AA301	300J/shot 350J/shot
Average energy	AA251 AA301	600J/second 1000J/second
Operating voltage	3600 to 4000Vdc	



### AA251, AA301 Technical Specification

#### **SOUND OUTPUT**

Source level	AA251	Typically 212dB re 1µPa at 1 metre with 200J
	AA301	Typically 215dB re 1µPa at 1 metre with 300J

Pulse length AA251 120/150/180µs at 50/100/200J

AA301 200µs depending on energy setting of CSP

Reverberation AA251 <10% of initial pulse

AA301 <10% of initial pulse

#### **COMPATIBLE ENERGY SOURCES**

AA251 CSP-P, CSP-Dv, CSP-Nv, CSP-SNv1250 AA301 CSP-P, CSP-Dv, CSP-Nv, CSP-SNv1250

### **COMPATIBLE CATAMARAN**

AA251 CAT 100: 940 (L) x 740 (W) x 500 (H) mm

CAT 200: 1280 (L) x 915 (W) x 525 (H) mm

AA301 CAT 200: 1280 (L) x 915 (W) x 525 (H) mm

CAT 300: 1700 (L) x 660 (W) 490 (H) mm

### **COMPATIBLE HV CABLE**

AA251 and AA301 HVC 2000

Standard length 75m

RMK 1/0 connectors complete with locking collars

### **AA301 TYPICAL PULSE SIGNATURE AT 300J**





