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

<table>
<thead>
<tr>
<th>PHYSICAL</th>
<th>Size</th>
<th>Weight air/water</th>
<th>Fixing centres</th>
<th>Connector</th>
</tr>
</thead>
<tbody>
<tr>
<td>AA251 Boomer plate</td>
<td>380 x 380mm</td>
<td>18kg/10kg</td>
<td>315mm²</td>
<td>RMK 1/0</td>
</tr>
<tr>
<td>AA301 Boomer plate</td>
<td>620 x 520mm</td>
<td>25kg/14kg</td>
<td>485mm x 440mm</td>
<td>RMK 1/0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ELECTRICAL INPUT</th>
<th>Recomm. energy</th>
<th>Maximum energy</th>
<th>Average energy</th>
</tr>
</thead>
<tbody>
<tr>
<td>AA251</td>
<td>50 – 200J/shot</td>
<td>300J/shot</td>
<td>600J/second</td>
</tr>
<tr>
<td>AA301</td>
<td>100 – 300J/shot</td>
<td>350J/shot</td>
<td>1000J/second</td>
</tr>
<tr>
<td>Operating voltage</td>
<td>3600 to 4000Vdc</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
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