AWT Globals ESBx Economy Line RF shield boxes are built for testing electronic modules, devices or antennas that need to be protected from interfering RF signals during measurement. Made of 10mm thick Aerospace Aluminum (T6-6061), these RF enclosures shield effectively, even when exposed to environments with very high RF interference. They come with standard SMA connectors and optional multi-port and AC filters. ESBx shielding boxes are well suited for R&D, QA and production. With shielding up to 90dBm, these shielding boxes offer an excellent value for the price.

**Order Information**

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESBx-4550</td>
<td>RF Shielding Box, Shielding &gt;90 / 85 dB, Frequency range 1000 - 3000 / 6000 MHz, Front door, Dimensions (WxDxH: inner working space / outer) 449/475 x 502/515 x 349/385 mm, 17.7/18.7 x 19.8/20.3 x 13.7/15.1 in, Weight 45 kg (99 lbs)</td>
</tr>
</tbody>
</table>

**Accessories**

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESBx-TERM50</td>
<td>Termination 50 Ohms SMA(m). Recommended to terminate unused SMA connectors of ESBx Economy Line shielding boxes for best RF shielding performance.</td>
</tr>
<tr>
<td>ESBx-SMA4 *</td>
<td>(4) SMA connectors (f) mounted on filter plate</td>
</tr>
<tr>
<td>ESBx-FILTER-A *</td>
<td>Multi-port-Filter: DB-9, RJ45, USB, DC</td>
</tr>
<tr>
<td>ESBx-BDC25</td>
<td>Replaces DC connector 2.1 mm of ESBx-OPTB with 2.5mm</td>
</tr>
<tr>
<td>ESBx_PROTO</td>
<td>Measurement protocol and data of RF Shielding Box</td>
</tr>
</tbody>
</table>

* Customer screw-on installation required. Options are not installed for shipping purposes.
Technical Specifications

**Dimensions**

- Outer (WxDxH): 475 x 515 x 375 (mm)
- Inner working space: 449 x 502 x 349 (mm)

**Material**

- Body: Aerospace Aluminum (T6-6061)
- Wall thickness: 10mm / 0.4 in
- Treatment: Paint
- RF Absorbing Material: Absorbing Rubber

**Shielding**

- without filters or SMA plate: 90 dB (1000 - 3000 MHz), 85 dB (3000 - 6000 MHz)
- with filters installed terminated SMA connector plate: 5-10 dB less per data filter, 5-10 dB reduction

**Environmental**

- Operating Temperature: -10° C to +50° C, 14° F to 122° F
- Storage Temperature: -20° C to +60° C, -4° F to 140° F

**Option Filter A**

<table>
<thead>
<tr>
<th>Filter Type</th>
<th>Baud Rate</th>
<th>Load</th>
</tr>
</thead>
<tbody>
<tr>
<td>DB-9</td>
<td>921,600 bps</td>
<td>25V DC, 2 A</td>
</tr>
<tr>
<td>RJ-45</td>
<td>10/100/1000 Mbps</td>
<td>5V DC, 0.2A</td>
</tr>
</tbody>
</table>

**USB**

- Type: 1.1, 2.0
- Max speed: 480 Mbps
- Max load: 5V DC, 0.2A

**Option SMA4**

- SMA connectors: 4
- Impedance: 50 Ohms
- Frequency range: 0 - 6000 MHz
- Insertion loss: < 0.2 dB
- Return loss: > 26 dB
- VSWR: 1:1.1

Specifications subject to change without further notification

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