The 3301C Active Monopole Antenna

The 3301C Active Monopole Antenna is designed to provide reception of an electric field throughout its frequency range, in a single band, without tuning or bandswitching, with an antenna factor of 3 dB roll-off points at 170 Hz and 35 MHz. Between 250 Hz and 20 MHz, the antenna factor is flat within +/- 1 dB. To prevent saturation by the low frequency signals, the lower 3 dB point is switch-selectable at 170 Hz, 1.9 kHz or 22 kHz. The Model 3301C is able to sense fields of +7 dB (uV/m) at 1 MHz with a 1 KHz bandwidth and 10 dB signal-to-noise ratio. Saturation will not occur below a field strength of 0.8 V/m resulting in an extremely wide dynamic range. The saturation alarms (audible alarm and light indicator) alert you of the need to use the internal attenuators.

The Model 3301C Active Monopole Antenna consists of an adjustable rod, a counterpoise 61 cm x 61 cm (24 in x 24 in), a broadband high input impedance amplifier built into the base, and an internal battery charger. The front panel controls and indicators include a power switch and power-on indicator, a receptacle for the DC adapter for battery recharging, a female BNC output connector, and a signal saturation indicator. Power is supplied by internal rechargeable nickel-metal hydride batteries. The Model 3301C Active Monopole antenna has built-in electrostatic discharge protection at the antenna circuit front end to protect the amplifier circuitry.

The Model 3301C complies with MIL-STD-461F requirements, with grounded RF outputs, a ferrite loaded cable, and a grounding bracket included with each unit.

STANDARD CONFIGURATION

- Adjustable Monopole Element
- Antenna Base with a Built-in Preamplifier and a Female BNC Connector
- Antenna Base Mount with ¼-20 UNC Internal Thread
- AA NiMH Batteries and AC/DC Adapter Charger
- Counterpoise
- MIL-STD 461F RF Cable and Grounding Kit
- Certificate of Calibration Conformance per ANSI C63.5 and SAE, ARP-958
- User Manual

OPTIONS

- Custom Carrying Case
- Non-metallic, Non-Reflective Tripod
- Model 3301CAL Calibration Block for Antenna Factor Calibrations
### Electrical Specifications

<table>
<thead>
<tr>
<th>MODEL</th>
<th>FREQUENCY RANGE</th>
<th>IMPEDANCE (NOMINAL)</th>
<th>CONNECTORS</th>
<th>POLARIZATION</th>
<th>CHARGER INPUT</th>
<th>BATTERIES</th>
<th>FAST CHARGE CURRENT</th>
<th>OPERATION TIME</th>
</tr>
</thead>
<tbody>
<tr>
<td>3301C</td>
<td>30 Hz - 50 MHz</td>
<td>50 Ω</td>
<td>BNC (F)</td>
<td>Linear</td>
<td>5v DC/4 amp</td>
<td>8 x NiMH AA</td>
<td>600 mA (typical)</td>
<td>30 hours (typical)</td>
</tr>
</tbody>
</table>

### Physical Specifications

<table>
<thead>
<tr>
<th>MODEL</th>
<th>BASE DEPTH</th>
<th>BASE HEIGHT</th>
<th>BASE WIDTH</th>
<th>ROD LENGTH (EXTENDED)</th>
<th>WEIGHT</th>
</tr>
</thead>
<tbody>
<tr>
<td>3301C</td>
<td>19.0 cm</td>
<td>8.8 cm</td>
<td>19.0 cm</td>
<td>104.0 cm</td>
<td>1.4 kg</td>
</tr>
<tr>
<td></td>
<td>7.5 in</td>
<td>3.5 in</td>
<td>7.5 in</td>
<td>41.0 in.</td>
<td>3.1 lb.</td>
</tr>
</tbody>
</table>

### Model 3301C Antenna Factor Typical Performance

![Model 3301C Typical Antenna Factor](image-url)