Programmable Rotary Vane Attenuators

FEATURES:
- Low Cost
- Compact Size
- 7.0 to 170 GHz
- High Accuracy
- Digital Readout
- Low Insertion Loss
- IEEE-488 Interface
- Full Waveguide Bands
- Manual Operation Mode

APPLICATIONS:
- Instrumentation
- Remote Control of RF Power Levels
- Fade Margin Testing of Microwave Radios

DESCRIPTION:
Cernex's CRV series precision programmable rotary vane attenuators are available in full waveguide bands from 7.0 to 170 GHz. Attenuation control is either manually via a front panel or remote controlled using a standard IEEE-488 interface. The attenuators’ small compact size incorporates both the electronic controller and microwave components. The unit operates from a single +24 volt DC source or with an optional AC adapter. Attenuation range is from 0 to 60 dB in 0.1 dB steps with 0.05 dB steps from 0 to 20 dB. A digital readout is provided on the front panel to display attenuation settings. The attenuators are highly reliable and designed to be used in ATE and remote power control applications.

SPECIFICATIONS:

<table>
<thead>
<tr>
<th>Waveguide Band</th>
<th>Xl</th>
<th>X</th>
<th>Xs</th>
<th>Ku</th>
<th>K</th>
<th>Ka</th>
<th>Q</th>
<th>U</th>
<th>V</th>
<th>E</th>
<th>W</th>
<th>F</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency Range (GHz)</td>
<td>7 to 10</td>
<td>8.2 to 12.4</td>
<td>10 to 15</td>
<td>12.4 to 18</td>
<td>18 to 26.5</td>
<td>26.5 to 40</td>
<td>33 to 50</td>
<td>40 to 60</td>
<td>50 to 75</td>
<td>60 to 90</td>
<td>75 to 110</td>
<td>90 to 140</td>
<td>110 to 170</td>
</tr>
<tr>
<td>Insertion Loss (dB) Max.</td>
<td>0.5</td>
<td>0.5</td>
<td>0.5</td>
<td>0.5</td>
<td>0.5</td>
<td>0.6</td>
<td>0.7</td>
<td>0.8</td>
<td>1.0</td>
<td>1.0</td>
<td>1.2</td>
<td>1.4</td>
<td></td>
</tr>
<tr>
<td>VSWR Max.</td>
<td>1.2:1</td>
<td>1.2:1</td>
<td>1.25:1</td>
<td>1.25:1</td>
<td>1.15:1</td>
<td>1.15:1</td>
<td>1.15:1</td>
<td>1.2:1</td>
<td>1.2:1</td>
<td>1.2:1</td>
<td>1.3:1</td>
<td>1.3:1</td>
<td></td>
</tr>
<tr>
<td>Max. Power (Watts)</td>
<td>5</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>0.5</td>
<td>0.5</td>
<td>0.4</td>
<td>0.3</td>
<td>0.25</td>
<td>0.25</td>
<td>0.2</td>
<td>0.2</td>
</tr>
</tbody>
</table>

HOW TO ORDER:
Specify Model Number

CRV – WG LH HF IL -- XX

To be determined by the factory

Example: To order a WR15 Rotary Vane Attenuator with 0.7db insertion loss, specify CRV1507507-XX

CERNEX RESERVE THE RIGHT TO CHANGE THE SPECIFICATIONS WITHOUT NOTICE