



### New Models Available

From WR-137 to WR-62 Waveguide Bands

Description	Specifications
<b>Attenuation Range</b>	0 dB to 60 dB (typical)
<b>Accuracy</b>	0.1 dB or 2% of reading*
<b>Scale Increments</b>	0.0 dB to 0.1 dB – 0.01 dB
	0.1 dB to 1.0 dB – 0.05 dB
	1.0 dB to 10.0 dB – 0.20 dB
	10.0 dB to 20.0 dB – 0.20 dB
	20.0 dB to 30.0 dB – 0.5 dB
	30.0 dB to 50.0 dB – 1.0 dB
	Max Setting 60 dB

**\*NOTE:**

Lower frequency versions are available from 8.4 GHz and up.

Accuracy is based on attenuation settings. Consult Miwave for specifications.

**OTHER BANDS AVAILABLE:**

- WR-137
- WR-112
- WR-90
- WR-75
- WR-62
- WR-51
- WR-34

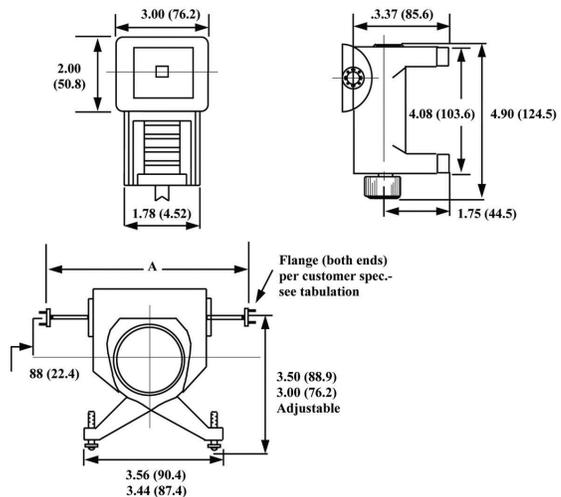
### Description

Mi-Wave's 510 Series Direct-reading Precision Attenuators provide 0 to 60 dB of calibrated attenuation by rotation of a resistive vane mounted in a circular waveguide section. These units are often referred to as precision rotary vane attenuators.

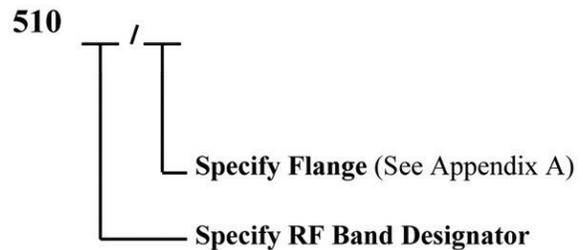
- *Low VSWR*
- *Direct Reading*
- *Low Insertion Loss*
- *Anti-backlash Drive*
- *Negligible Phase Shift*
- *Precision Construction*
- *Frequency Independent*

### Applications

The 510 Series Direct-reading Precision attenuators are used in all RF measurement systems. They are most frequently used in RF substitution-type set-ups for precise measurement of characteristics such as isolation, coupling, insertion loss, and gain.



### Ordering Information



### Technical Specifications (typical)

Model No.	510K	510A	510B	510U	510V	510E	510W	510F	510D	510G	510H	510J
<b>Frequency Band (GHz)</b>	18–26.5	26.5–40	33–50	40–60	50–75	60–90	75–110	90–140	110–170	140–220	170–260	220–325
<b>Insertion (Loss) (dB)</b>	0.5	0.5	0.6	0.7	0.9	1.0	1.2	1.5	3.0	4.0	5	5.5
<b>VSWR (typical)</b>	1.30	1.15	1.15	1.15	1.20	1.20	1.20	1.25	1.3	1.3	1.3	1.35
<b>Weight (oz)</b>	52	38	38	36	29	28	28	26	24	24	22	1
<b>Average (Low) Power Handling (Watts)</b>	0.3	0.3	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
<b>High Power Handling (Watts)</b>	n/a	n/a	n/a	n/a	3	3	3	n/a	n/a	n/a	n/a	n/a