



..... Motorized, Programmable Attenuators

QPA

Characteristics

- ◆ Compact Size
- ◆ Offered over 7.0 to 170 GHz
- ◆ High Accuracy and Reliability
- ◆ Digital Readout, IEEE-488 Interface
- ◆ Manual/Motorized Operation Modes



Product Description

QuinStar Technology's precision Motorized Programmable Rotary Vane Attenuators are available in full waveguide bands from 7.0 to 170.0 GHz. Attenuation control can be either manual via a front panel or remote-controlled using a standard IEEE-488 interface. Series QPA motorized attenuator's small compact package incorporates both the electronic controller and microwave attenuator components. The unit operates with a single +24 volt DC source or with an optional AC adapter.

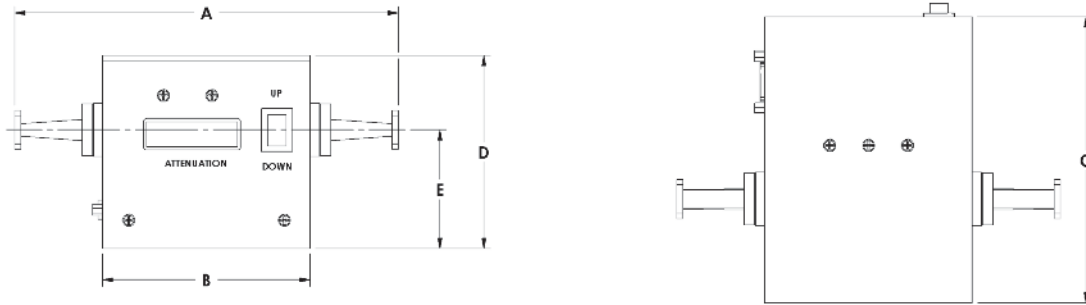
Attenuation range is from 0 to 50 dB in 0.1 dB steps with 0.05 dB steps over 0 to 20 dB. A digital readout is provided on the front panel to display the current attenuation setting. The attenuators are highly reliable and designed to be used in Automated Test Equipment and in applications requiring remote power control.

Specifications

| Waveguide Band | Frequency Band (GHz) | Insertion Loss (Max.) | VSWR (Max.) | Power (Max.) |
|----------------|----------------------|-----------------------|-------------|--------------|
| XL (WR-112) | 7.0 - 10.0 | 1.0 dB | 1.2:1 | 5 watts |
| X (WR-90) | 8.2 - 12.4 | 1.0 dB | 1.2:1 | 2 watts |
| XS (WR-75) | 10.0 - 15.0 | 1.0 dB | 1.25:1 | 2 watts |
| KU (WR-62) | 12.4 - 18.0 | 1.0 dB | 1.25:1 | 2 watts |
| K (WR-42) | 18.0 - 26.5 | 1.0 dB | 1.15:1 | 1 watt |
| Ka (WR-28) | 26.5 - 40.0 | 1.0 dB | 1.15:1 | 0.5 watt |
| Q (WR-22) | 33.0 - 50.0 | 1.0 dB | 1.15:1 | 0.5 watt |
| U (WR-19) | 40.0 - 60.0 | 1.0 dB | 1.15:1 | 0.4 watt |
| V (WR-15) | 50.0 - 75.0 | 1.0 dB | 1.20:1 | 0.3 watt |
| E (WR-12) | 60.0 - 90.0 | 1.4 dB | 1.2:1 | 0.25 watt |
| W (WR-10) | 75.0 - 110.0 | 1.5 dB typ. | 1.25:1 typ. | 0.25 watt |
| F (WR-08) | 90.0 - 140.0 | 1.8 dB | 1.3:1 typ. | 0.2 watt |
| D (WR-06) | 110.0 - 170.0 | 2.2 dB | 1.3:1 typ. | 0.2 watt |



Outline Drawings/Mechanical Specifications



| WAVEGUIDE BAND | OUTLINE DIMENSIONS, inches/mm | | | | |
|----------------|-------------------------------|------------|------------|-----------|-----------|
| | A | B | C | D | E |
| XL | 11.69/296.9 | 4.66/118.3 | 6.32/160.5 | 3.73/94.7 | 2.29/58.2 |
| X | 11.69/296.9 | 4.66/118.3 | 6.32/160.5 | 3.73/94.7 | 2.29/58.2 |
| XS | 11.19/284.2 | 4.66/118.3 | 6.32/160.5 | 3.73/94.7 | 2.29/58.2 |
| KU | 10.94/277.8 | 4.00/101.6 | 5.50/139.7 | 3.73/94.7 | 2.29/58.2 |
| K | 8.48/215.4 | 4.00/101.6 | 5.50/139.7 | 3.73/94.7 | 2.29/58.2 |
| KA | 6.87/174.5 | 4.00/101.6 | 5.50/139.7 | 3.73/94.7 | 2.29/58.2 |
| Q | 6.24/158.4 | 4.00/101.6 | 5.50/139.7 | 3.73/94.7 | 2.29/58.2 |
| U | 6.0/152.4 | 4.00/101.6 | 5.50/139.7 | 3.73/94.7 | 2.29/58.2 |
| V | 5.78/147.0 | 4.00/101.6 | 5.50/139.7 | 3.73/94.7 | 2.29/58.2 |
| E | 5.78/147.0 | 4.00/101.6 | 5.50/139.7 | 3.73/94.7 | 2.29/58.2 |
| W | 5.78/147.0 | 4.00/101.6 | 5.50/139.7 | 3.73/94.7 | 2.29/58.2 |
| F | 5.78/147.0 | 4.00/101.6 | 5.50/139.7 | 3.73/94.7 | 2.29/58.2 |
| G | 5.78/147.0 | 4.00/101.6 | 5.50/139.7 | 3.73/94.7 | 2.29/58.2 |

Ordering Information

