CERNEX, Inc.

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

CRV Series

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:

Waveguide Band	C	XI	X	Xs	Ku	K	Ka	Q	U	V	E	W	F	D
Waveguide Size	WR-137	WR-112	WR-90	WR-75	WR-62	WR-42	WR-28	WR-22	WR-19	WR-15	WR-12	WR-10	WR-8	WR-7
Frequency Range (GHz)	5.85 to 8.20	7 to 10	8.2 to 12.4	10 to 15	12.4 to 18	18 to 26.5	26.5 to 40	33 to 50	40 to 60	50 to 75	60 to 90	75 to 110	90 to 140	110 to 170
Insertion Loss (dB) Max.	0.7	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.7	0.8	1.0	1.1	1.5	2.5
VSWR Max	1.2:1 Nom	1.2:1	1.2:1	1.25:1	1.25:1	1.15:1	1.15:1	1.15:1	1.15:1	1.2:1	1.2:1	1.2:1	1.3:1	1.3:1
Max. Power (Watts)	10	5	2	2	2	1	0.5	0.5	0.4	0.3	0.25	0.25	0.2	0.2

HOW TO ORDER:

Specify Model Number

CRV – WG LH HF IL -- XX ← To be determined by the factory

Waveguide Size

Low End Frequency

Insertion Loss

High End Frequency

Example: To order a WR15 Rotary Vane Attenuator with 0.7db insertion loss, specify CRV15507507-XX

CERNEX RESERVE THE RIGHT TO CHANGE THE SPECIFICATIONS WITHOUT NOTICE