CERNEX, Inc.

Motorized Rotary Vane Phase Shifters

FEATURES:

- High Accuracy
- Digital Readout
- Low Insertion Loss
- Computer Controlled
- Full Waveguide Bands
- Precision Construction

APPLICATIONS:

- RF automated Measurement Systems
- Characterization

DESCRIPTION:

CMP Series

Cernex's CMP series motorized rotary vane phase shifter is available in W/G bands from 18.0 to 110 GHz. The CMP series is a computer controlled version of Cernex's standard direct reading phase shifter and features a 0 to 360 degree range with 0.5-degree resolution. The phase shifter is controlled by a precision stepping motor and all electronics required to drive the motor are contained within the phase shifter housing. Custom microprocessor based electronics translate the desired phase shifter setting into the required motor position and provide the proper drive signals for the motor. Motor speed is ramped up and down ensuring accurate positioning and smooth operation. The unit can be controlled remotely through an IEEE-488 interface or manually with a front panel switch. A three-digit readout on the front panel displays the setting. All that is required is a 24-volt, 500 mA supply.

SPECIFICATIONS:

Waveguide Band	K	Kb	Ka	Q	U	V	E	W
Waveguide Size	WR-42	WR-34	WR-28	WR-22	WR-19	WR-15	WR-12	WR-10
Frequency Range (GHz)	18 to 26.5	22 to 33	26.5 to 40	33 to 50	40 to 60	50 to 75	50 to 90	75 to 110
Insertion Loss (dB) Max.	1.0	1.0	1.0	1.0	1.1	1.2	1.4	1.5
VSWR	1.30	1.35	1.15	1.15	1.15	1.20	1.20	1.20
Average Power (Watts)	1.0	0.5	0.5	0.5	0.4	0.3	0.2	0.2
Weight (oz)	63	63	60	60	59	50	30	30
Resolution (degree)	---------- 1 ----------							
Repeatability	---------- ±1 ----------							
Accuracy	---------- 4 ----------							
Speed (Sec) 0-360	---------- 5 ----------							

HOW TO ORDER:

Specify Model Number

CMP – WG LF HF IL -- XX ← To be specified by the factory

Waveguide SIze

Low End Center Frequency

High End Center Frequency

Insertion Loss

Example: To order a WR15 Rotary vane phase shifter, specify CMP1155075-XX

CERNEX RESERVE THE RIGHT TO CHANGE THE SPECIFICATIONS WITHOUT NOTICE