529 Series
Motorized Rotary Vane Phase Shifters

Description
Mi-Wave has developed a new motorized rotary vane phase shifter which is available in W/G bands from 18.0 to 170 GHz. The 529 Series is a computer controlled version of Mi-Waves' standard direct reading phase shifter and features a 0º to 360º range with 0.5 degree resolution. IEEE-488 & USB available.

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, which is included.

Applications
The 529 Series Motorized Direct-reading Phase Shifters are used in all RF automated measurement systems. They are most frequently used in RF substitution type set-ups for precise measurement of characteristics including bridge circuits and phased arrays.

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

Dimensional Specifications

Electrical Specifications

Ordering Information

When the unit is connected to 24 VDC with no connection to the IEEE interface. The phase shifter is controlled by a front panel toggle switch. If the toggle is held up or down from 5 counts or more, the phase shifter changes at a rapid rate to facilitate larger changes.