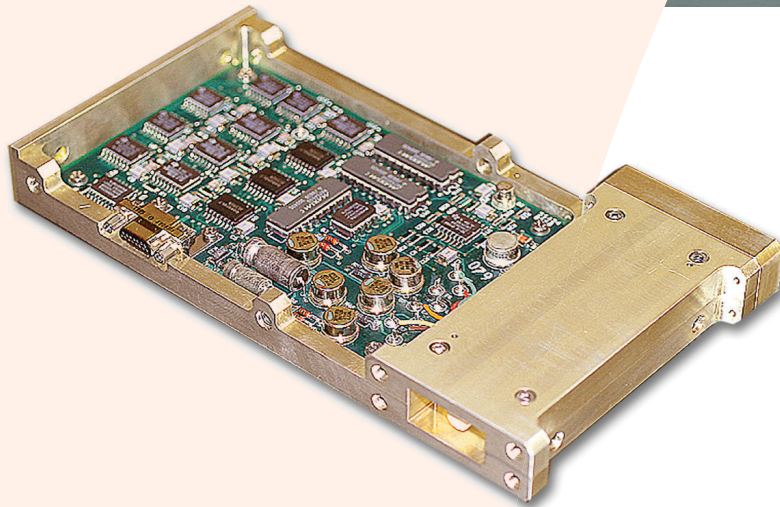


Supporting RF Systems on Land, on the Sea, and in the Air



Latching Rotary-Field Phase Shifters

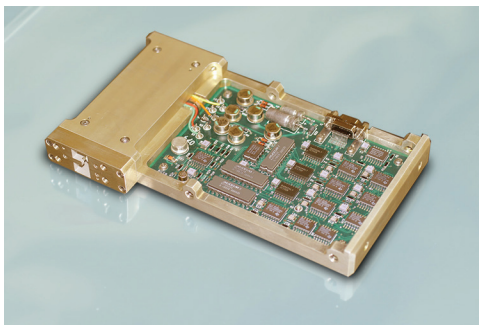
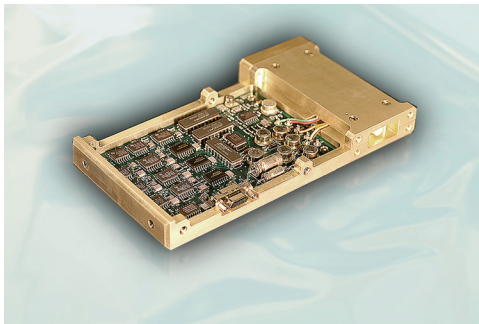
X-Band
1 GHz Bandwidth
Excellent Power Handling



MAG's Latching Rotary-Field Ferrite Phase Shifters combine the best of phase shifter technologies. Latching Rotary-Field Ferrite Phase Shifters offer true modulo-360 degree operation with excellent peak and average power handling capabilities across a 1 GHz bandwidth at X-Band. The Latching characteristic eliminates the need for holding current thereby reducing system power needs.

These phase shifters are available with different waveguide interfaces at each end, and offer the option of incorporating twist sections without increase in length at a nominal cost. The electronic driver is available integrated with the phase shifter as shown here, or available for remote mounting.

Specifications and outline drawing of MAG's Latching Rotary-Field Ferrite Phase Shifters are presented on the back of this sheet.



Measured values taken at lab ambient



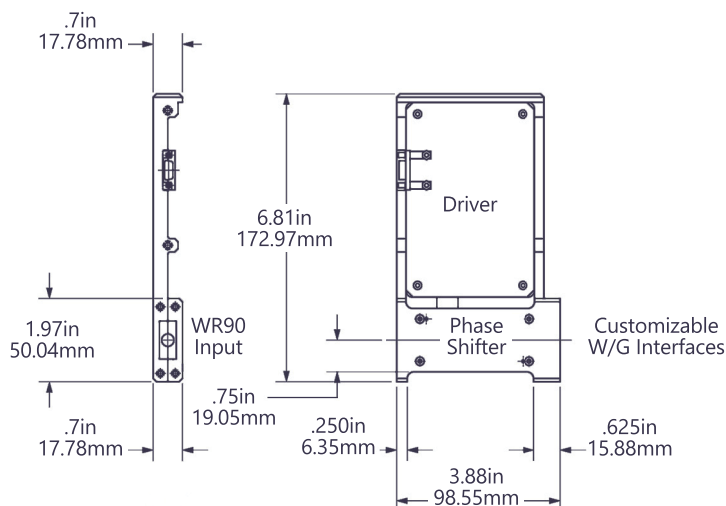
Latching Rotary-Field Phase Shifters

PARAMETER	VALUE
Frequency	X-Band
Insertion Loss, Peak (dB)	1.0 @ 9.2 - 9.8 GHz
Insertion Loss, Peak (dB)	1.2 @9.0 - 9.2 GHz; 9.8 - 10. 0 GHz
Insertion Loss, Average (dB)	0.8 @ 9.2 - 9.8 GHz
Insertion Loss, Average (dB)	1.0 @ 9.0 - 9.2; 9.8 - 10.0 GHz
Return Loss, Average (dB)	17.7 or better, 9.2 - 9.8 GHz ¹
Return Loss, Average (dB)	13.98 or better, 9.0 - 9.2; 9.8 - 10.0 GHz ¹
Return Loss, Average (dB)	19.09 or better, 9.2 - 9.8 GHz ²
Return Loss, Average (dB)	15.56 or better, 9.0 - 9.2; 9.8 - 10.0 GHz ²
Peak RF Power (Watts)	1500
Average RF Power (Watts)	100
RMS Phase Error, Max (Degrees)	3.5
Size, Phase Shifter Only (Inches)	3.88 x 1.97 x 0.7
Size, Phase Shifter and Driver (Inches)	3.88 x 6.81 x 0.7
Weight with Driver (Ounces)	12.3
Operating Temperature Range (Degrees C)	-30 to 60

¹ special single-ridge output

² WR90 output

Outline Drawing



Sample of programs supported by MAG as OEM:

APQ-164 B-1B ORS
 APQ-181 B-2
 APS-143 CP-140 Imaging
 APY-1/2 E-3 AWACS
 AR320 3D Air Defense
 ARTS-V1 / CLPS
 ARTS-V2
 ASARS-2 Synthetic Aperture
 ARSR-4 FAA Long Range
 ASTOR
 DWSR-2501C Doppler Weather
 Global Hawk Synthetic Aperture
 I-15/23 Reflectarray
 I-30 Simulator
 MPN-14K Landing Control
 PAAS Test Range
 Princeton Plasma Physics Laboratory
 RAC 3D Air Defense
 Skyshield 35 Air Defense
 Smart-L 3D Air Defense
 SPN-35C Approach Control
 SPQ-9B Surveillance / Tracking
 TPAAS Test Range
 TRS-3D Multimode
 TRS22XX 3D Air Defense
 ZPQ-1 Predator TESAR

MAG DMSMS program support:

MPQ-64 Sentinel SHORAD
 APY-1/2 E-3 AWACS
 BMEWS / PAVE PAWS
 HAWK
 SPN-35C Approach Control
 MSQ-T43 MTE System

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