

Model 153 Quad Phase Shifter

The model 153 contains four independent, bi-directional, solid state phase shifters in one chassis. The 153 has two setting modes, select and control each shifter independently or preload the transfer registers and update the selected (any or all) shifters on a common strobe/salvo.

The unit's front panel permits operators to check the health and phase setting of each of the shifter assemblies in the chassis. See below for remote control interface options.

Electrical

Chassis Configuration	Four independent shifters per chassis
Frequency Range	1020 – 1100 MHz
Insertion Loss	-2.0 dB max.
Resolution	5 bits, 11.25 degrees per step
Accuracy	+/- 5.5 degrees max.
Phase Slope / Ripple	+/- 3.0 degrees max.
Amplitude Variation vs. Setting	0.5 dB max.
Switching Speed	2 usec max.
Switching Rate	DC to 40 KHz
Maximum CW Input Level	+44 dBm, 25 watts
Maximum Pulsed Input Level,	+54 dBm, 250 watts at 10% duty cycle
Impedance	50 ohms
Return Loss / VSWR	-20 dB / 1.22:1

Remote Control Interfaces

Option 001	Differential TTL-ACT via four DB15 connectors
Option 002	Synchronous Serial RS422 interface

Primary Power

Option 003	DC power, +5V @ 3.0 Amps -60V @ 1.0 Amps
Option 004	115/230 VAC, 50-400 Hz, 95 watts

Mechanical

Chassis Size	1U (1.75") H x 19" W x 15" D 44.5mm H x 483mm W x 381mm D
Weight	24 lbs., 11 kg.
RF Connectors	SMA female

Environmental

Operating Temperature	-40 to +85 C
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