Eastern OptX Series 5000 Doppler Generator





Features

- Available for L, S, C, X, Ku, and Ka bands (0.5 to 40 GHz)
- 0 to 3 MHz Doppler Shift
- Stable and repeatable performance
- Moving target generation.
- Continuous, glitch-free operation.
- Radar Pulse Synchronization for improved side-band suppression.
- Available as built-in delay line and target generator option in Series 3000 Systems.
- Ultra-High Resolution Doppler Frequency Control for improved side-band suppression and target speed selection.

Description

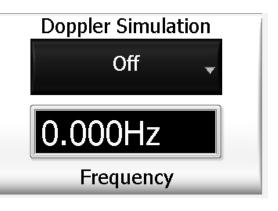
Eastern OptX introduces moving target generators covering radar frequencies from 1 – 40 GHz. These compact systems provide target generation with Doppler from 0 to 3 MHz, and allows the user to set target and radar source speeds and directions. Systems may be operated remotely using wireless control with scenario generator features including flight path replication, moving source and targets, and multiple target options. Data may be entered in multiple formats including target and radar speed and direction, start-stop LONG-LAT and speeds, and directly with pre-programmed map placements. All Series 5000 Doppler Generators may be used together with the Eastern OptX Series 3000 delay lines to create both Doppler and step-wise target and source movements. This combination creates a complete moving target replication. **Doppler may be synchronized to pulsed radar systems or operated in freerunning mode. When free-running the Series 5000 provides continuous, glitch-free operation. 19" Rack-Mount Version available.**

Specifications



Param	neter	Specification	Notes
Doppler Range		0 to 3 MHz	Other ranges available
Slew Rate		100 ms	Jump time to any freq.
Typical RF Loss		12 dB	
Input Return Loss		15 dB	Minimum
Target Direction		Opening, Closing, and eral	Lat- Programmable
1 dB Input Compression		-15 dBm	Minimum
Noise Figure		12 dB Typical	Lower NF optional
Step S	Size	0.5 Hz	Depending on max freq.
RF Connector		SMA (Jack)	Other Types Available
Dimer	nsions	3" x 12" x 14"	
Control		MS Surface	Supplied with system (USB PC control capable)
Modes		Synchronous, free runr phase inverting, blanki	
rt mber	Primary Band (GHz)	Broad Band (GHz) (20 dB typical side-	

Number	(GHz) (35 dB typical side -band suppres- sion)	(20 dB typical side- band suppression)
5000-1	1 to 2	0.5 to 2.5
5000-2	2 to 4	1.5 to 5
5000-3	4 to 8	3 to 10
5000-4	8 to 12	6 to 14
5000-5	12 to 18	6 to 19
5000-8	34 to 38	18 to 40
5000-7	User Defined	



Eastern OptX, Inc. A Veteran Owned Small Business

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