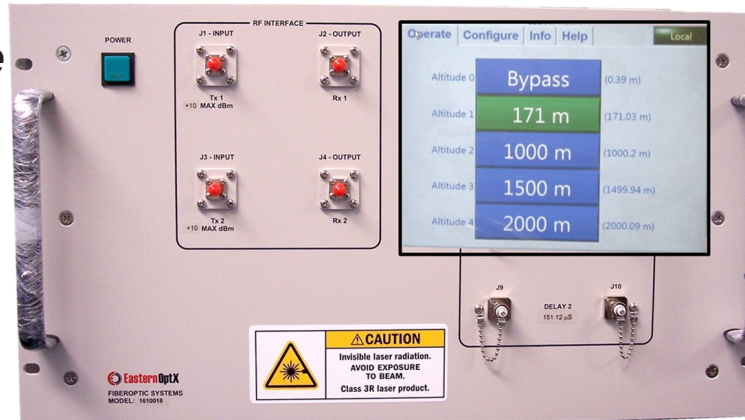




## Model 2040+ 5G Radio Test Set

*Bringing the Test Range  
to Your Test Bench*

### Product Summary (Preliminary)



### Introduction

The Eastern OptX Series 2040+ 5G Two-Radio System is a test network which replicates the propagation path for real-world applications. The system allows the user to test a variety of Air Interfaces using the same system without modification, and at the same time. This is not a signal emulator. The systems use low-loss fiber optic cable to create the propagation delay associated with radio transmissions from 20 to 40 GHz. Two radios may be connected to the system allowing full duplex operation. Each radio may operate over identical Air Interface with uni or bi-directional multipath. The delays between radios may be varied from 0 to 1 mile in 5 foot steps with propagation loss control. The 2040+ creates a variable test range right in your lab. It can be used as a design aid and as a test tool for new modulation and encryption schemes prior to expensive and time consuming field testing.

### Standard System Features

- 2 Radio Ports
- Radio to Radio distances from 0 to 1 mile in 5 foot steps. (Full Duplex)
- Multipath Replicator (Optional)
- Propagation Loss Control
- External Delay Option for Future Expansion
- Frequency Range: 20 to 40 GHz
- Single or Multiple Air Interfaces may be tested simultaneously. (Full Duplex)
- Interferer Injection
- Clutter and other Impairment Generation
- Remote Control Interface
- Front Panel LCD Touch Screen Control
- Optional Horn Antenna and Circulator.

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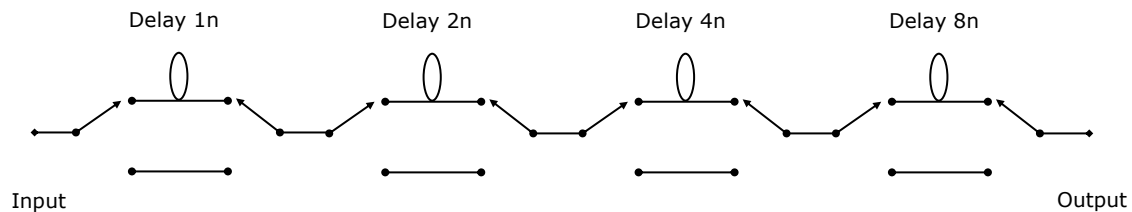
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Parameter	Specification	Notes
<b>Instantaneous Bandwidth</b>	Variable	(Limited by input circulator)
<b>Accuracy</b>	1 %	Optional 0.5%
<b>Repeatability</b>	0.01%	At constant temperature
<b>System RF Gain</b>	6 dB	Typical, 1 mile @ 30 GHz
<b>VSWR</b>	2 : 1	Maximum
<b>Spurious Free Dynamic Range</b>	100 dB/Hz <sup>2/3</sup>	Minimum
<b>1 dB Input Compression</b>	-15 dBm	Minimum
<b>Noise Figure</b>	25 dB (13 dB Typ.)	Maximum (Lower NF optional)
<b>Input/Output Impedance</b>	50 Ω	Nominal
<b>Dimensions</b>	19" Rack Per EIA-310-D	3U, 18" - 22" depending on design

### Delay Configuration Options:

#### Progressive Delay Configuration



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