

E501 MICROWAVE DELAY LINE



- All In One Turnkey Solution
- Time Delays up to 250 μ s
- Frequency up to 18 GHz

*We Bring the
Test Range
to your Test Bench*





PRODUCT SUMMARY

The *EOX E501 / Microwave Delay Line* is a high performance turnkey solution for radar and communications market. The *E501* allows for ultra wide bandwidth, low loss, high isolation and immunity from EMI and EMP with time delays up to 250 μ sec at frequencies up to 18 GHz.

Core Technology - Delay Lines

Eastern OptX core technology enables the conversion of microwave signals to optical signals (E/O), time delaying this signal then reconvert the light back to original microwave signal (O/E) with superior fidelity over traditional time delay methods. Products include Radar Target Simulation, Radar Altimeter Testing, Channel Simulation (Air Interface) and Multipath Creation. Many of our products allow users to test “in the lab” resulting in dramatically lower costs and higher efficiencies than available with outdoor test ranges. Systems are available with fixed or programmable delays ranging from a few nanoseconds (2 feet) to hundreds of microseconds (150 miles), input RF frequencies of up to 40 GHz, internal attenuation control accurately simulates free space propagation loss. All features can be touch-screen controlled using an intuitive graphical user interface. Founded in 1998, Eastern OptX is a Veteran owned small business whose management & engineering team has over a century of experience in Radar and Telecommunications testing.

FEATURES

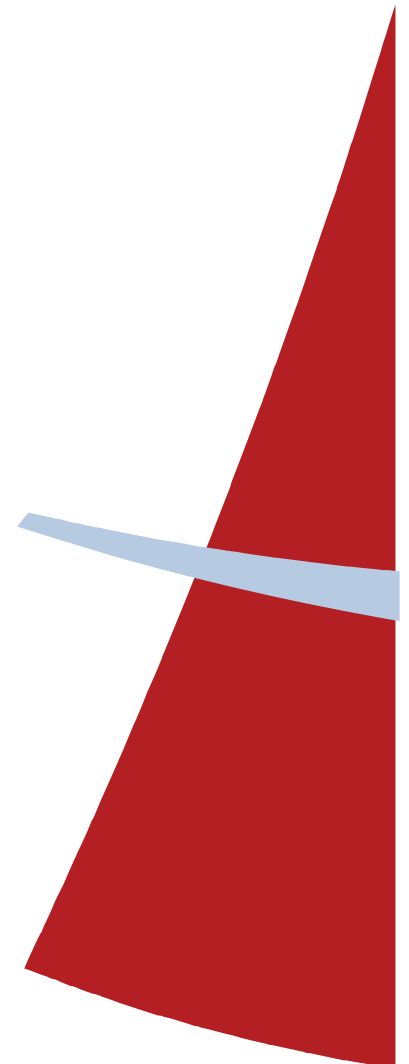
- ⇒ Easy, repeatable operation
- ⇒ Delay available to 100 μ sec
- ⇒ Optional propagation loss is programmed and coupled to each delay setting

APPLICATIONS

- ⇒ Radar target simulation
- ⇒ Signal processing
- ⇒ Extension of radar range sites

RELIABILITY

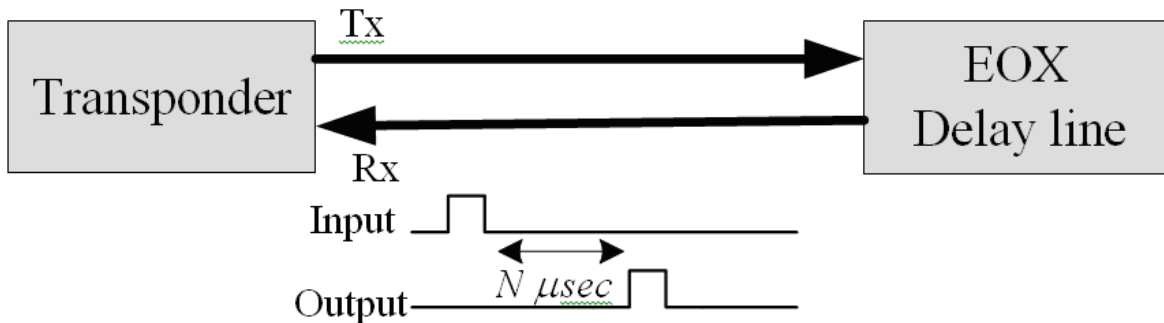
- ⇒ > 140,000 hours of operation in field environments



E501

Parameter	Specification	Notes
Frequency Range	.1—6 GHz	Also available 11,13,18 GHz
Delay Accuracy	1%	NIST traceable
Delay Repeatability	0.01%	At constant temperature
Delay Range	Up to -100 μ sec	Specify with purchase order
VSWR	2 : 1	Maximum
Spurious Free Dynamic	100 dB/Hz ^{2/3}	Minimum
Maximum Input Power	0 dBm	CW or Pulsed
Bypass Delay	1 -100 μ sec	External delay spools optional
Input/Output Impedance	50 Ω	Nominal
Dimensions	19" Rack Per EIA-310-D	3U, 22" deep

Target simulation and calibration of radar systems



A Veteran Owned Small Business

710 E. Main Street

Moorestown, NJ 08057

856-231-0668

www.eastern-optx.com

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