



*Eastern OptX, Inc. is a Veteran
Owned Small Business*

Founded in 1998, Eastern OptX is a Veteran owned & operated small business whose management & engineering team has over a century of experience in Radar and Telecommunications testing.

Core Technology—Radar Altimeter Test Sets

Eastern OptX core technology enables the conversion of microwave signals to optical signals (E/O), time delaying this signal then reconvertng 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 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.



Features

- Easy, repeatable operation
- Up to 8 switchable altitude cells
- Altitude cells may be ordered in progressive or discrete configurations
- 12 inch resolution
- External delay option
- Stable and repeatable performance
- Built In Self Test
- Doppler Generators
- Ascent and Descent Simulation
- Variable Aircraft Antenna Cable Compensation

Applications

- >140,000 hours of operation in field environments
- Systems in continuous operation for more than 4 years

Series 6000 Radar Altimeter Test Set

The Eastern OptX Series 6000 Altimeter Test Set is designed to test and calibrate radar altimeter systems. The Series 6000 provides multiple, programmable delays with front panel and/or remote computer control. It features ultra wide bandwidth, low loss, high isolation, and high dynamic range. Able to simulate altitudes up to 50,000 feet, the test set operates from 4.2 to 4.4 GHz and offers altitude accuracy up to 0.1%.



Features

- Easy, repeatable operation
- Up to 8 switchable altitude cells
- Altitude cells may be ordered in progressive or discrete configurations
- Accurate amplitude balance
- External delay option
- Stable and repeatable performance

Applications

- >140,000 hours of operation in field environments
- Systems in continuous operation for more than 4 years

EA-6061 Radar Altimeter Test Set

The EA-6061 Radar Altimeter Test Set is designed to test and calibrate any and all radar altimeter systems regardless of protocol or encryption. The EA6061 provides multiple, programmable delays with front panel and/or remote computer control. It features ultra wide bandwidth, low loss, high isolation, and high dynamic range. Able to simulate altitudes up to 6350 feet, the test set operates from 4 to 5 GHz and offers NIST traceable altitude accuracy up to 2 inches.



Features

- Easy, repeatable operation
- Altitude settings from 0 to 6350 feet in 50 foot steps
- Propagation loss is programmable and coupled to each altitude setting
- Built-in automated self calibration using external PNA
- Programmable for automated production testing
- 10 ns zero-delay offset
- Four user-defined aircraft altimeter cable compensation
- Input signal taps for external testing

Applications

- Altimeter design and development, production testing and calibration
- Altimeter protocols: all formats and encryptions including FMCW, constant difference frequency (CDF), pulsed or non-pulsed, spread spectrum, frequency hopping, variable power
- Flight line and laboratory test capability; ruggedized travel cases available

EA-6071 Flight Line Altimeter Test Set

The EA-6071 Flight Line Altimeter Test Set features an All in One Turnkey Solution. It will operate with any and all formats and encryptions, and offers a travel case for field operation as well as an optional rechargeable battery.



Features

- Three different altitude settings
- Propagation loss matched to delay setting

Applications

- Altimeter—testing, qualification, calibration, trouble shooting and verification

For More Information
Please Contact Your Local Eastern Instrumentation
Sales Representative: