

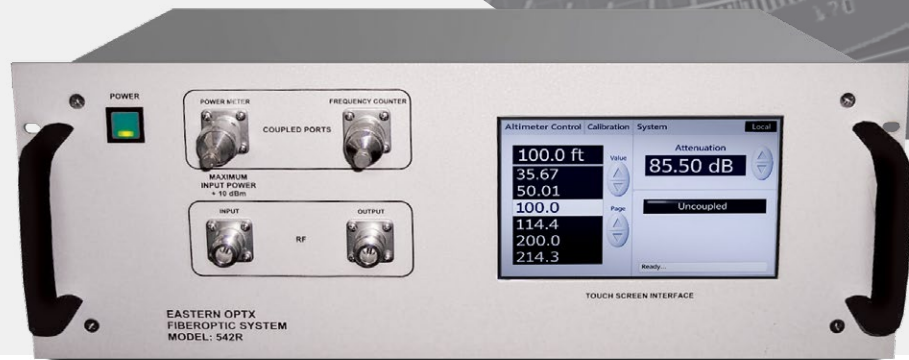
# Model EA6061

**Test & Calibrate all Radar Altimeters with  
Altitudes up to 6,350 feet with an Accuracy  
better than 0.5%**

## Features

- Easy, repeatable operation
- Altitude Settings from 0 to 6,350 feet in 50 ft steps
- Propagation loss is programmable and coupled to each altitude setting per range formula
- Built-in automated self calibration using external PNA
- Programmable for automated production testing
- Four aircraft cable compensation settings
- 10 ns zero-delay offset
- 35 foot intrinsic delay with user defined AID
- 19-inch rackmount (3U)

**Configure Now**



Global Provider of Test & Measurement Solutions



## EA6061 Universal Radar Altimeter Test Set

Eastern OptX EA6061 Altimeter Test Set is designed to test and calibrate any and all radar altimeter systems regardless of protocol or encryption including FMCW and LPI (Low Probability of Intercept). The EA6061 provides multiple, programmable delays with front panel and/or re-mote computer control. It features ultra wide bandwidth, low loss, high isolation, and high dynamic range. Able to simulate various altitudes, the test set operates from 4 to 5 GHz and offers NIST traceable altitude accuracy up to 2 inches.

### Technology Features

EOX fiber optic technology overcomes the shortcomings of conventional schemes such as acoustic, digital, and coaxial transmission line delays including:

- Quantization Errors
- Triple Transit Time
- Dispersion

### Core Technology - Delay Lines

Our Core Technology enables the conversion of microwave signals to optical signals (E/O), time delaying this signal then reconverts 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 multi-path creation. Many of our products allow users to test in a laboratory environment, 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 operated from the front panel touchscreen using the intuitive graphical user interface.





# EA6061 Universal Radar Altimeter Test Set



| Parameter                   | Specifications                        | Notes                          |
|-----------------------------|---------------------------------------|--------------------------------|
| Frequency Range             | 4 to 5 GHz                            |                                |
| Altitude Accuracy           | 2 inches or 0.25%                     | NIST Traceable                 |
| Altitude Repeatability      | 0.01%                                 | At Constant Temperature        |
| Bandwidth                   | 0.1 to 5 GHz                          | Ultra wide band                |
| VSWR                        | 2 : 1                                 | Maximum                        |
| Spurious Free Dynamic Range | 100 dB/Hz <sup>2</sup> / <sub>5</sub> | Minimum                        |
| Maximum Input Power         | 30 dBm                                | CW or Pulsed                   |
| Input/Output Impedance      | 50 Ω                                  | Nominal                        |
| Dimensions                  | 19" Rack Per EIA-310-D                | 5.25" (3U), 22" deep           |
| Power                       | 120/230 VAC                           | Rechargeable Battery Available |

| Feature                           | Options / Description                                                                                                                                                                               |
|-----------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Number of Delays                  | 7                                                                                                                                                                                                   |
| Altitude Settings                 | Up to 6350 in 128 steps (customer specify)                                                                                                                                                          |
| Altitude Protocols                | All formats and encryptions including FMCW, Constant Difference Frequency (CDF) , pulsed or non-pulsed, spread spectrum, frequency hopping, variable power, and low probability of intercept (LPI). |
| Remote Control                    | Ethernet, USB, GPIB, TTL                                                                                                                                                                            |
| Calibration                       | Built-in automated software for easy system calibration                                                                                                                                             |
| RF connector                      | Customer specify                                                                                                                                                                                    |
| Aircraft cable compensation (AID) | User programmable 35 to 150 feet in one foot steps.                                                                                                                                                 |
| Amplitude Control                 | User defined or coupled to altitude settings (free space propagation loss )                                                                                                                         |
| Coupled Test Ports                | 10 and 20 dB.                                                                                                                                                                                       |
| Switching Speed                   | < 10 ms                                                                                                                                                                                             |
| Travel Case                       | Water-resistant, portable                                                                                                                                                                           |

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Manufactured in the USA  
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