



SUCCESS STORY

In-Flight Wireless Testing & Simulation

Multichannel Programmable Attenuator Systems ensure successful roll-out of in-flight wireless services

The in-flight streaming and entertainment market is growing at 13% annually according to the latest industry numbers. And with 5G and Wi-Fi 6E roll-out, travelers are demanding more reliable connectivity, the newest applications, with everything operating at maximum speed. Spectrum Control's Multichannel Programmable Attenuator Systems are used by In-Flight Wireless system providers to test and simulate their services, applications, and in-flight wireless links.

Faster, More Affordable Testing & Simulation

Spectrum Control's Multichannel Programmable Attenuator Systems are used to simulate the dynamic conditions within the aircraft as well as ground-to-air links and satellite links. Spectrum Control's solutions enable repeatable, affordable simulation, and support multiple test scenarios. They are also used to test 5G wireless links, new Wi-Fi 6E services, wireless access points, and multi-user MIMO applications.

A flexible, easy to program solution for bench testing and calibration setups and subsystem applications.

Spectrum Control's line of Multichannel Programmable Attenuator Systems offer service providers an extensive range of performance options and configurations to choose from, while maintaining standard programming commands and control interfaces for ease of use.



Spectrum Control's 8321 Multichannel Programmable Attenuator System for bench test and ATE applications, with up to 16 attenuation channel configurations supported.



Spectrum Control's Butler Matrices, Switches, Phase Shifters, and Programmable Attenuators have been developed specifically for use in the new, shared 5G/Wi-Fi 6E unlicensed spectrum (5925 to 7125 MHz), supporting enhanced simulation and testing.

Rapid Testing, Easy Access

Spectrum Control's Model 8321 is mounted in a full rack enclosure and can be configured for up to 16 independent attenuation channels, and allows for multiple attenuator channels to be controlled using various control interfaces, or locally via the front panel. Features include:

- DC to 40 GHz frequency range options
- Attenuation range options up to 127 dB
- Attenuation resolution as low as 0.25 dB
- Standard control interfaces include Front Panel, Ethernet, USB, Serial, and LabView-based GUI
- Can be configured with front, rear, or through RF connector options
- RoHS compliant