

Wireless testing for a 5G world and beyond

Programmable attenuators and switch-based products from Spectrum Control

To support the development, verification, and testing of 5G networks, services, and devices, both tech giants and industry upstarts rely on Spectrum Control's extensive portfolio of Programmable Attenuators, Switch/Attenuation/Phase Shifter Matrices, MIMO and beamforming accessories, and customized solutions.

Spectrum Control attenuator and switch products offer the user an extensive range of performance options and configurations to choose from, while maintaining standard programming commands and control interfaces for ease of use. LabView based GUI software and drivers are supplied with most standard product, along with Ethernet and USB control interfaces. A HTTP protocol, for use via a web browser is also standard, as is a procedure for clearing and sanitizing units to guidelines set forth in NIST SP 800-88 for flash and EEPROM memories. This allows for their use both in and out of secure environments.

For Next-Gen Wireless Testing and IoT Roll-Out

You're invested in 5G's potential and you need results. Spectrum Control has decades of RF, Microwave and mmWave product development experience, combined with a legacy of superior quality, reliability, and technical performance. Our multi-channel Programmable Attenuator Units, Switch Matrices, and custom Signal Routing & Conditioning solutions are used by leading technology firms to test wireless links, access points, mobile radios and related devices.



The potential of 5G and beyond is too massive to pass up. But roll-out is critical. Millimeter-wave frequencies will help realize 5G's promise of ultra-high peak rates and low latency performance. This will yield increased capacity and throughput for mobile broadband and provide an alternative means of offloading currently congested 4G networks. Plus, there is significant interest in deploying 5G technology in the new mid-bands (3.5 – 6 GHz), as well as existing mid-bands (1.8 – 2.6 GHz), to achieve 5G coverage as rapidly as possible, along with the increased Wi-Fi spectrum allocation above 6 GHz. Spectrum Control's high-performance testing tools empower your successful roll-out across the spectrum.

Typical applications supported include:

- Emerging IoT and 5G Wireless R & D
- mmWave OTA Testing
- Wireless Fading Simulation & Test
- Phased Array Antenna Simulation & Test
- MIMO and MU-MIMO Simulation & Test
- Wi-Fi Testing
- Handover Simulation & Mobility Testing
- Transceiver/Radio to Radio Test Systems
- Engineering & Production Test Labs and ATM



Standard and custom solutions to support Signal Routing & Conditioning, Handover and Attenuation Mesh Networks, Phase Shifting and switching applications.