



SUCCESS STORY

Using Spectrum Control's Butler Matrix for Wi-Fi MIMO Testing

Simulates beamforming network to mission-proof the roll-out of your Wi-Fi devices and services

Ten billion devices are connected to Wi-Fi, and the number is growing. As 5G and then future generation devices establish connections to everything, testing the roll-out of your network, access point or end client device is now mission-critical. Spectrum Control's Butler Matrix is used in the labs of some of the world's top technology creators so they can be absolutely certain their products are optimized for an always-on world.

For Next-Gen Wireless And Device Roll-Out

Spectrum Control's Butler Matrix creates a beamforming network to simulate real-world conditions, directing coverage over distances and across obstacles, towards mobile devices to simulate their real-world response. This enables true testing simulation of public networks, in-flight Wi-Fi, smartphones, sensors, routers and other access points, and for military electronic warfare.

"5G roll-out is happening much faster than 4G"

Optimizing Wi-Fi networks and devices for a connected world demands MIMO (Multiple Input Multiple Output) technology. Multi-user MIMO enables Wi-Fi devices to send data to multiple devices at the same time, maximizing bandwidth. It's tricky stuff. The Butler Matrix ensures both access points and client devices are optimized for this new technology by simulating real-world environments in the lab.



8x8 Butler Matrix
4x4 Butler Matrix also available



The cost of failure grows higher. As the world shifts to 5G, and with billions of devices connected, testing the potential of your network, access points and client devices becomes critical for success.

Innovation Designed and Built in the U.S.A.

For over sixty years, Spectrum Control's Weinschel brand has become synonymous with leadership in RF and microwave technologies and superior quality components and subsystems. And we never stop innovating. Our Butler Matrix specs include:

- Simultaneously stream up to 8 different devices
- Works with uplink and downlink frequencies
- Channel frequency ranges extended to 7.25GHz
- Wi-Fi 6 certified
- Supports 2.4, 5 and 6GHz bands
- Designed and manufactured in the USA
- Expand testing even further with addition of Multichannel Programmable Attenuator Multipath Emulator modules