SUCCESS STORY

D-Sub Connectors for 5G Test Enclosures

Filtered interconnects suitable for permanent installations or quick deployment mobility environments

Radio communication testing platforms, such as RF test enclosures, are designed for both signaling and non-signaling testing. This includes shielding cubes for high-frequency testing of 5G cellular devices. Spectrum Control's filtered d-sub connectors are built with capacitors that **strip unwanted noise or electromagnetic interference** (EMI) that can impact test equipment system performance (up to 6 GHz).

EMI is common in RF testing equipment. Filtered connectors provide a secure EMI/RF-free environment for high frequency cellular testing.

Why Spectrum Control's Connectors are Chosen

Spectrum Control offers a wide range of d-sub connector options that will **improve performance, save board space, and reduce costs by managing EMI at the signal and power I/O.** The 25-pin adapter geometry of the 5G interconnects is perfect for test enclosure applications that require **fast and easy "plug and play" on both sides. Threaded inserts provide easy installation.**

Filtering capable of 70 dB from 1GHz to 6GHz in a d-sub connector adapter form-factor.

Plus, Spectrum Control manufactures the ceramic capacitors used as the filtering element in all of their filtered connectors. They are designed and produced in Spectrum Control's State College, PA (USA) facility. This provides customers with **high-quality parts and the industry's shortest lead times.**

One-piece die-cast housing and integrated ground clips for more effective high-frequency shielding.

Clear Competitive Differentiators

Spectrum Control d-sub connectors are built with a multi-pole circuit that utilizes materials **specifically designed for 5G cellular bands.** This market-leading coaxial construction offers a soldered lead to capacitor and capacitor to its die-cast shell, making it **ideal for high-frequency 5G testing.**

Spectrum Control's filtered interconnect design includes all soldered electrical connections resulting in low ESL/ESR at frequencies up to 6GHz and beyond.

Electrical specifications

- Working voltage: 50 VDC
- Dielectric withstanding voltage: 150 VDC
- Temperature range: -55 to 125°C
- Capacitance levels: 1000pF and 4000pF available