

SUCCESS STORY

EMI Filter Assemblies for UAV Ground Control Station

High performance power filter assemblies to suppress interference

Spectrum Control manufactures high-performance power filter assemblies for UAV Ground Control Stations (UGCS). Agencies that use UAVs, including the US Department of Defense, US Armed Forces, and military forces for many countries outside of the US, have the ability to provide human control of these devices from land or sea-based centers. Potential RFI/EMI noise generated by this operation is a critical concern, however. Spectrum Control's power filters suppress conducted interference present on both power and signal lines.



UGCSs control UAVs and send data to the command network

Design, Testing & Manufacture

These EMI power filter assemblies have rugged construction and will keep UGCSs protected from EMI/RFI disturbance in the harshest environments. The custom design of this assembly includes Spectrum Control's filtered circular connectors and resin sealed EMI filters. All designs are optimized through EMC testing and verifications in Spectrum Control's on-site test lab.

Power filter assemblies improve operational effectiveness by protecting UGCS against EMI/RFI susceptibility

Spectrum Control has decades of design experience interpreting custom specifications that allow seamless development of difficult designs. This design flexibility means delivering on the most stringent requirements and incorporating value-adds such as switches, circuit breakers, or transient protection.

Custom Power Filters

Spectrum Control designs encompass both power line and signal line filters. Custom enclosures, or box filters, typically consist of multi-pole filters to provide superior performance, EMI grounding and shielding, and the ability to encapsulate the components to provide shock/vibe protection. Custom mounting points will fit precisely within your equipment, and various box materials can provide low weight, high corrosion resistance, and paint schemes as required.

- Available to meet MIL-PRF-15733, MIL-STD-461, and MIL-STD-1399 standards
- Available to meet TEMPEST and FCC requirements
- Insertion loss characteristics up to 1 GHz
- Voltage rating 115-250VAC and 400VDC up to 400 Hz



High-Performance Power Filter Assembly



Resin-Sealed Filters



Filtered Circular Connector

High-performance EMI power filter assemblies have rugged construction to meet MIL-STD environmental conditions