SUCCESS STORY

EMP/HEMP Filters for Military Battle Command System

Filters that protect sensitive electronics equipment during hazardous transient conditions.

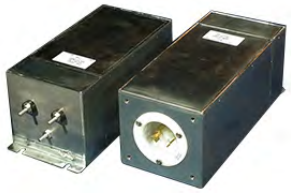
Military battle command systems offer real-time information across all battlespaces through an integrated network. Land, airborne, maritime, and cyber domains all use this system to ensure better combat identification on the battlefield. Spectrum Control's filters protect the network enclosure assembly in the command-and-control systems susceptible to hazardous transient conditions, including an electromagnetic pulse (EMP) and high altitude electromagnetic effects (HEMP).

Why Spectrum Control Filters

Spectrum Control has over five decades of custom power filter design and testing experience supporting military requirements. We offer low NRE, quick turn design to production, and the ability to offer tailor-made solutions. Spectrum Control's coaxial filter technology, ceramic capacitor capabilities, and magnetic solutions allow us to design and manufacture custom, rugged, high-reliability filters with shorter lead times than competitors.

Integrated circuits of mobile and fixed facilities can be affected by an EMP/HEMP event

Spectrum Control has a fully equipped EMC testing laboratory for customer compliance with specific system requirements. This offers a flexible resource to assist in product development by identifying and correcting EMI susceptibility and emission problems. Transient testing (military, lightning, ESD) is also provided.



Standard and custom designs, including MIL-STD-188-125, E1 and E2 pulse test requirements are available.

EMP/HEMP filters help ensure mission safety and system integrity by protecting the command center of the battlefield.

Case Study & Competitive Differentiators

For example, Spectrum Control offered an off-the-shelf HEMP filter solution, but the customer requested greater shock and vibe performances. This allowed us to develop a solution specific to their overall requirements, including a 100A input filter, with size requirements to fit their chassis, and including Spectrum Control's filtered interconnects and gaskets into the design.

By incorporating Spectrum Control's EMI filtering products and in-house testing, we were able to offer a superior and more cost-effective solution.

Product features:

- Insulation resistance DWV tested prior to discharge resistor and MOV installation
- Temperature rise is less than 25°C
- Off-the-shelf filters rated for 6A, 16A, and 30A
- Custom designs available