

Aerospace Electrical and EMC testing

Evaluate the reliability, safety and electromagnetic compatibility of vehicle equipment and components.



The increasing integration of electronic systems in vehicles and aircraft increases the complexity of their development processes and of their validation test plans. In order to meet industry standards and avoid re-engineering costs, manufacturers need to evaluate and ensure the reliability, safety and electromagnetic compatibility of the electrical and electronic components from the development and concept stage.

Our solution

Applus+ Laboratories offers a comprehensive testing service for electrical and electronic components for the defense and aerospace sector , from original components to full vehicles.

Our facilities and experience allow us to collaborate with the client from the earliest stages of design up to validation, helping the manufacturer achieve the required quality levels.

Our services include:

- Test protocols and standards definition
- Development and pre-evaluation testing
- Compliance testing with industry (ABD0100) and international (RTCA-DO, MIL-STD, SAE, STANAG) standards

Testing capabilities for components, military vehicles and aircrafts:

- Radiated emissions
- Radiated immunity
- Conducted emission and immunity
- Immunity to electrostatic discharges

- Tests tailored to customer specifications

Testing facilities:

- 1 semi-anechoic chamber for testing full vehicles with:
 - Integrated dynamometer
 - Driving robot for development tests
 - Cooling and fume extraction systems
- 3 semi-anechoic chambers for 3 m measurements (light vehicles and components)
- 4 shielded chambers
- Facilities for open field measurements
- Automated and modular test benches
- Specialized equipment for on-site measurements
- Electromagnetic simulation software and systems
 - RCS (Radar Cross Section) and stealth technology tests
 - EMC simulations

Applus+ Laboratories works under strict confidentiality. We are one of Europe's leaders in electrical and electromagnetic compatibility tests, with over 20 years of experience. We participate in the international standardization committees.

Benefits

- Lower re-engineering costs and shorter development times
- Work with experts to achieve the required quality levels
- Applus+ Laboratories, one stop shop to perform the full characterization of your electrical/electronic equipment (EMC, electrical safety, and vibrations, among others)