



# EMI/EMC Testing

**We  
Take A  
Closer Look**

## EMI & EMC Testing

Applied Technical Services conducts EMI & EMC testing to analyze the interference and compatibility of a subject to ensure industry compliance. EMI, or electromagnetic interference, tests for the emission of any signal or noise from a subject that causes interference with other vehicles, equipment, or machinery. EMC, or electromagnetic compatibility, tests a subject's ability to operate without creating electromagnetic interference for other devices in the subject's environment. Manufacturers of electronic devices, medical equipment, aerospace/military vehicles and machinery, and consumer goods rely on EMI & EMC testing, as all electronic devices have the potential to cause electromagnetic interference. As the number of electronic devices increases, so does the potential for interference between devices.

- Aerospace
- Electronic Devices
- Military/Defense
- Space and Nuclear



## Testing Standards

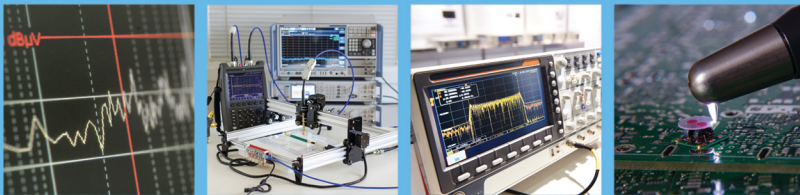
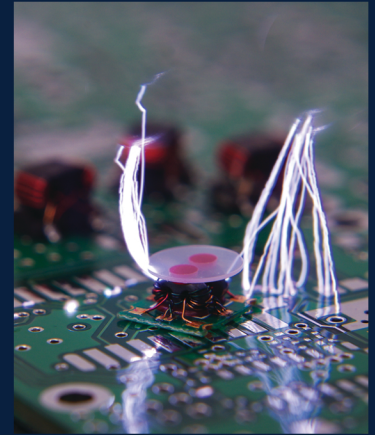
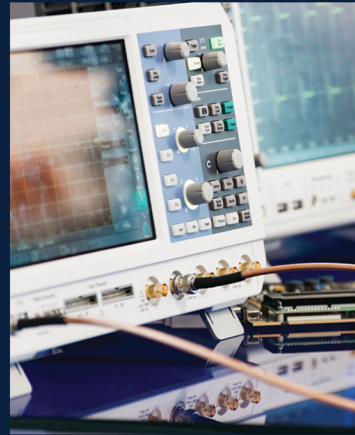
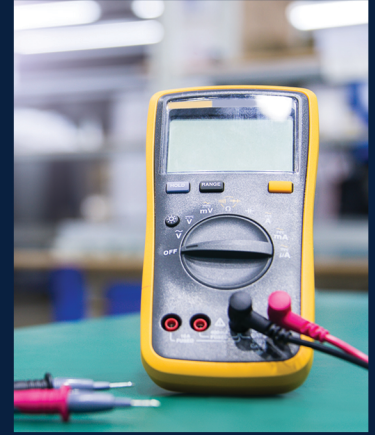
### RTCA-DO-160

This testing standard establishes the criteria for environmental aircraft testing. This standard applies to all sizes of aircraft in various fields, including but not limited to general aviation aircraft, helicopters, commercial wide-body airliners, and supersonic transport aircraft. Applied Technical Services performs the following EMI & EMC-related RTCA-DO-160 testing procedures:

- S15 Magnetic Effect
- S16 Power Input
- S17 Voltage Spike
- S18 Audio Frequency Conducted Susceptibility
- S19 Induced Signal Susceptibility
- S20 Radio Frequency Susceptibility
- S21 Emission of Radio Frequency Energy
- S22 Lightning Induced Transient Susceptibility
- S25 Electrostatic Discharge

### MIL-STD-704

This standard establishes the requirements and characteristics of aircraft electric power provided at the input terminals of electric utilization equipment.



### MIL-STD-461

This standard establishes EMI & EMC testing procedures and limits for military subsystems and equipment. MIL-STD-461 determines the interface and verification requirements for electromagnetic interference emissions and the vulnerability characteristics of electromechanical equipment used by the US Department of Defense. Applied Technical Services offers the following MIL-STD-461 testing procedures:

- |         |         |
|---------|---------|
| • RE101 | • RE102 |
| • RS101 | • RS103 |
| • CE101 | • CE102 |
| • CS101 | • CS114 |
| • CS115 | • CS116 |
| • CS117 | • CS118 |

At Applied Technical Services, our certified experts are highly trained, experienced professionals committed to providing the highest level of client satisfaction with innovative technologies, reliable information, and excellent customer service. ATS is ISO 17025 accredited in calibration, mechanical, nondestructive, and chemistry by the A2LA and ISO-9001 certified. ATS has increased our testing capabilities by adding EMI/EMC testing to our Phoenix location, having acquired the former DnB Engineering facility located in nearby Chandler, AZ. With this acquisition, ATS Phoenix is now your one stop shop for all your testing needs, servicing Arizona and the West Coast. Get in contact with us to schedule EMI testing today.

ATS, founded in 1967 and headquartered in Marietta, GA, is one of North America's leading engineering firms with extensive testing and inspection capabilities delivering a combination of experience, professionalism, and decisive responsiveness for our clients.