RF components perform vital functions in mission-critical systems for military aerospace. Such products require superior performance and reliability under conditions of stress and in hostile environments.

High performance environmental connectors are generally used to interconnect electronic and fiber optic systems in sophisticated aerospace, military, commercial and industrial equipment. Amphenol RF is recognized as a leading supplier in the Military-Aerospace industry for its quality MIL-C-39012 interconnect products and innovative solutions.

**Applications:**
- Remote Control Systems
- Aircraft Radio
- Communications Systems
- Interrogation Systems
- Antenna Systems
- Tactical Radio Programs
- Joint Strike Fighter
- Gang or Blind Mate high power systems

**Our Products:**

**AFI**
The AFI connector interface utilizes a proprietary configuration that allows for industry leading “float” to compensate for the axial and radial misalignment due to packaging tolerances. This industry-leading float results in a maximum misalignment allowed by the system of .030” [0.8 mm] radial and .040” [1.0 mm] axial. The interface is available in both 75 Ω and 50 Ω configurations.

**Blind Mate Type-N Adapter (M/F)**
The Blind Mate Type-N Adapter allows for the blind mating of multiple “N” connectors in a rack and panel design. The floating mounting system compensates for axial and radial misalignment. This connector provides excellent electrical performance from 0 to 6 GHz.

**MCX**
While the MCX uses identical inner contact and insulator dimensions as the SMB, the outer diameter of the plug is .140 inches, which is 30% smaller than the SMB. This series provides designers with options where weight and physical space are limited. MCX provides broadband capability though 6 GHz with a snap-on connector design.
Military-Aerospace Market

SMP - Mini SMP
This subminiature, push-on, blind mate microwave connector provides a floating bullet to compensate for misalignment in many board-to-board applications. The SMP conforms to the MIL standard interface requirements, offers a frequency range of DC to 40 GHz and will tolerate significant shock and vibration.

TNC – Standard, Reverse Polarity and Emersion Proof Types
The TNC connector is a miniature, threaded, weatherproof unit with a constant 50 Ω impedance and operates from 0 - 11 GHz. It is manufactured in accordance with MIL-C-39012 and can be used for flexible, semi-rigid or conformable cable types.

Type-N
The Type-N connector is a medium sized, threaded unit featuring a 50 Ω impedance structure and conforms to MIL-C-39012. It was developed to satisfy the need for a durable, weatherproof, medium-size RF connector with consistent low VSWR through 11 GHz.

SMA
The 50 Ω SMA connector is a semi-precision, subminiature, threaded unit that provides excellent performance from DC to 18 GHz. This high-performance connector is compact in size, has outstanding durability and conforms to MIL-C-39012.

SMC
The SMC features a 10-32 threaded coupling with broadband performance. It is available in 50 & 75 Ω impedance with low reflection from DC-10 GHz. This series is excellent for use in high vibration environments and conforms to MIL-STD-39012 with an interface compliant to MIL-STD-348.

To complement our core connector and adapter product offerings, Amphenol RF has the added advantage of providing a complete RF cable assembly to meet your performance specifications. For more information, please contact assembly@amphenolrf.com

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