

RF INTERCONNECT SOLUTIONS FOR SPACE APPLICATIONS

The growing complexity of space missions demands RF interconnect solutions that can withstand extreme conditions while delivering uncompromised performance. From satellites transmitting critical data back to Earth to rockets navigating precise launch sequences, reliable connectivity is at the core of every successful operation. Ground stations rely on high-frequency components for uninterrupted communication, while space robotics and the International Space Station require durable, high-speed links to support advanced research and exploration. Amphenol RF provides the technology that enables these innovations, ensuring secure and efficient signal transmission across the vast expanse of space.



APPLICATIONS

- Satellites & Ground Stations
- Unmanned Exploration Vehicles
- International Space Station
- Space Robotics
- Telemetry & Navigation Systems

CORE COMPETENCIES

- Ruggedized products offering dust, vibration and corrosion resistance
- Extreme weather resistant RF interconnect
- Customized hybrid solutions supporting RF signal and power
- Lightweight and compact high-frequency products
- High density products that can accommodate the restricted space restraints

PRODUCTS



MINI-FAKRA



SMA



SMP



SMPM



TNC



BNC



HD-BNC



2.92mm



MCX



MMCX



ANTENNAS

ALSO AVAILABLE

ADAPTERS



Designed for applications requiring two RF interfaces (between series or in-series) to be connected together.

FIXED LENGTH CABLE ASSEMBLIES



Pre-configured cable assemblies featuring common connector and cable configurations available in standard lengths.

WE OFFER

- Connectors
- Adapters
- Cable Assemblies
- Antennas

AMPHENOL RUGGEDIZED PRODUCTS



The ARC series is designed to offer more ruggedized connectors, adapters and cable assembly options in various durable interfaces such as space.

NON-MAGNETIC RF CONNECTORS



The non-magnetic RF connector series ensure optimal performance and safety in space applications where magnetic interference is a concern. By eliminating the risk of magnetic disruption, these connectors safeguard sensitive equipment and maintain reliable signal integrity for mission-critical operations.

QPL MILITARY APPROVED RF PRODUCTS



High-Performance connector series engineered to meet specific standards of quality for military and defense use. These RF interconnect products are pre-tested and proven to follow required specifications before procurement.

CUSTOM SOLUTIONS

Amphenol RF offers custom space-ready interconnect solutions engineered to meet diverse mission requirements, from extreme temperatures and radiation resistance to high-density, lightweight designs.



SPACE APPLICATIONS

Series	Satellites & Satellites Ground Station	Unmanned Exploration Vehicles	International Space Station	Space Robotics	Telemetry & Navigation System
Mini-FAKRA	●			●	●
SMA	●	●	●	●	●
SMP	●	●	●		●
SMPM	●	●	●		●
TNC	●	●	●	●	●
BNC	●			●	
HD-BNC	●			●	
2.92mm	●	●			●
MCX	●	●	●	●	
MMCX	●	●	●	●	
Antennas		●		●	●

DESIGN FEATURES



IP-Rated Waterproof

Waterproof sealed solutions are engineered to protect your application from outside elements and are fully tested to IP67 or higher specifications in the mated and unmated condition.



Vibration-Resistant

One-piece bodies and other design considerations are taken into account to provide a more robust option for applications where there are concerns for the security of the locking interface due to extreme conditions.



Ruggedized

Ruggedized connector, adapter and cable assembly options are designed to offer durable solutions for applications that may be exposed to harsh external conditions.