

RF INTERCONNECT SOLUTIONS FOR SMART GRID APPLICATIONS

As Electric Vehicles (EVs) and IoT applications become standard there is a growing need to modernize aging power grid infrastructure. A smart grid is a next-generation electrical grid with advanced sensor networks and automated control systems that improves the efficiency, reliability and sustainability of electricity distribution. This requires updated control communications and newly developed power control elements. Amphenol RF offers a broad portfolio of interconnect products to support the advancement in communication between utilities and end-users in order to automatically respond to energy demand. These versatile RF options within smart grid infrastructure support energy generation and distribution and real-time monitoring of city networks.



GRID RESILIENCE



**ELECTRIC VEHICLE
CHARGING**



MICROGRIDS



**DISTRIBUTED ENERGY
RESOURCES/STORAGE**



SMART METER

CORE COMPETENCIES

- Waterproof IP67/68 sealed solutions ideal for harsh environments
- Ruggedized products offering dust, vibration and corrosion resistance
- Quick mating and quick disconnect RF connectors
- Customized hybrid solutions supporting RF, signal and power
- Blindmate connector systems
- Custom cable assemblies and sub-systems

DESIGN FEATURES



IP-RATED WATERPROOF OPTIONS

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



VIBRATION-RESISTANT DESIGNS

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 external conditions.

PRODUCTS



BNC



MCX



MMCX



N-TYPE



SMA & RP-SMA



SMB



TNC & RP-TNC



**EXTERNAL IP67
WI-FI ANTENNA**



**INTERNAL FPC
ANTENNA**



ULTRAMINIATURE CONNECTORS

Ultraminiature connector series (AMC, AMMC and AMC4) are low profile PCB products with an extremely small board footprint.



BOARD-TO-BOARD CONNECTORS

Board-to-board solutions are engineered to maximize radial and axial float, eliminating the need for cables between boards and simplifying designs to eliminate errors.

Also Available



FIXED LENGTH CABLE ASSEMBLIES

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



ADAPTERS

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