RF INTERCONNECT SOLUTIONS FOR ROBOTAXIS

As the Robotaxi industry advances toward widespread adoption, the demand for reliable, high-performance RF interconnect solutions continues to grow. Autonomous fleets rely on seamless communication, precision navigation, and robust data transmission to ensure safe, efficient, and scalable operations. From real-time vehicle-to-everything (V2X) connectivity and advanced driver-assistance systems (ADAS), to next-generation infotainment and passenger engagement, Amphenol RF's high-performance solutions play a critical role in enabling the innovation and scalability of robotaxi operations.

OUR CORE COMPETENCIES

- Customized hybrid solutions supporting RF signal and power
- Custom camera interconnect solutions available
- High-frequency products
- Sealed-ruggedized interconnects to prevent ingress of fluids and dust
- Board-to-board connectors for direct connection between PCBs

TECHNOLOGIES

Wireless Connectivity
- V2X/V2V communication
- Telematics
- WiFi
- Bluetooth/BLE
- Ultra-Wideband (UWB)

Safety & Navigation
- GPS Navigation
- LiDAR
- Camera
- ADAS

Vehicle Intelligence & User Experience
- Smart Cabin
- Software-Defined Vehicles
- Infotainment
- Human Machine Interface (HMI)
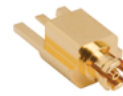- Wireless Charging

PRODUCTS

FAKRA   MINI-FAKRA   MCX   SMA   SMP   SMPM   HD-EFI   ANTENNAS

WE OFFER

- Connectors
- Cable Assemblies
- Adapters
- Custom Solutions

CUSTOM SOLUTIONS

CAMERA INTERCONNECT

Sealed automotive camera interconnects are designed with overmolding of cable and connectors for a fully integrated, clean solution. Sealed interconnects prevent ingress of fluids and dust while high float solutions allow for blind mating of camera back.

SMART ANTENNA INTERCONNECT

RF interconnect that enables the consolidation of all radio functions into a single module to create effective and efficient communication between automotive systems.

Robotaxi Technologies

SERIES	Wireless Technology		Safety & Navigation				Vehicle Intelligence & User Experience		
	V2X/V2V Communication	Telematics	GPS Navigation	LiDAR	Camera	ADAS	Smart Cabin	Software-Defined Vehicles	Infotainment
FAKRA		●	●	●	●	●	●	●	●
Mini-FAKRA		●	●	●	●	●	●	●	●
MCX	●	●	●			●	●	●	●
SMA	●	●	●	●	●	●	●	●	●
SMP				●	●	●	●	●	●
SMPM				●	●	●	●	●	●
HD-EFI	●	●		●		●	●	●	●
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.