

RF INTERCONNECT SOLUTIONS FOR ADAS & AUTONOMOUS SYSTEMS

The move toward full automation and autonomy across multiple sectors is relentless. At the core of this transformation lies a non-negotiable requirement: reliable, high-speed connectivity. Systems like Advanced Driver Assistance Systems (ADAS) and autonomous platforms are only as effective as the data networks that bind them together, demanding interconnect solutions that are exceptionally robust.



AMPHENOL RF provides high-performance products that keep critical systems connected and secure in any environment. Built for signal integrity and precision, our solutions ensure accurate, real-time data transmission. From smart vehicles and drones to industrial robots and defense systems, we enable fast and reliable communication for safe and efficient automation.

OUR CORE COMPETENCIES

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

APPLICATIONS



Automotive & Transportation

- Advanced Driver Assistance Systems (ADAS): lane-keeping, adaptive cruise control, collision avoidance, parking assistance
- Fully autonomous vehicles: passenger cars, ride-hailing fleets, robo-taxis
- Commercial trucking: autonomous freight delivery, platooning for fuel efficiency
- Public transit: self-driving shuttles, buses



Industrial

- Warehouse automation: autonomous forklifts, guided vehicles (AGVs), robotic picking systems
- Mining & construction: self-driving haul trucks, excavators, cranes
- Smart agriculture: Autonomous tractors



Defense & Military

- Unmanned ground vehicles (UGVs): reconnaissance, logistics transport, EOD robots
- Unmanned aerial systems (UAS): autonomous surveillance, strike drones, swarm operations
- Autonomous naval vessels: mine detection, patrolling, resupply



Aerospace & Urban Air Mobility

- Drones: obstacle detection, terrain awareness, precision landing
- eVTOL and air taxis: autonomous flight navigation, collision avoidance in urban air corridors
- Commercial aircraft: autonomous taxiing, pilot-assist systems, advanced autopilot
- Space: autonomous docking systems, robotic arms, hazard detection on planetary landers/rovers

PRODUCTS



AUTOMATE Type A
Mini-FAKRA



FAKRA



Sealed AUTOMATE
Type A Mini-FAKRA



AUTOMATE Type B
Mini-FAKRA



CABLE
ASSEMBLIES

CUSTOM CAMERA INTERCONNECT



Sealed automotive interconnect 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 capabilities allow for blind mating of the camera back.