

RF INTERCONNECT SOLUTIONS FOR

CAMERA & VISION SYSTEMS

Technology today features advanced vision systems inside and outside of the vehicle or body of the device. Standard vehicles and next-generation consumer products may contain more than eight cameras now. In autonomous and self-driving vehicles this includes HD, 4K, stereo and thermal imaging cameras. Similarly, industrial and manufacturing applications use vision systems with multiple cameras to help machines make decisions based on what they “see.”

Amphenol RF offers a wide range of ruggedized, waterproof and vibration-resistant solutions that are ideal for these technologies, along with a broad selection of high-speed RF interconnect which is required to connect cameras to on-board computers.



AUTOMOTIVE CAMERA APPLICATIONS

- Backup Camera
- 360-Degree Surround View
- Adaptive Cruise Control Camera
- Driver Facing
- Dash Cam
- Thermal Imaging for Night Vision
- Front View Camera
- Side Sensing Camera

MACHINE VISION APPLICATIONS

- Quality Control and Inspection
- Automated Manufacturing
- Adaptive Cruise Control Camera
- Robotics and Automation
- Object Recognition and Sorting
- Thermal Imaging for Night Vision
- Barcode and QR Code Reading
- Medical Imaging
- Augmented Reality

CAMERA PROTOCOLS

GMSL®

FPD-Link

CORE COMPETENCIES

- High-frequency solutions
- Sealed, ruggedized interconnects to prevent ingress of fluids and dust
- High-float solutions allow for blind mating of camera back
- Overmolding of cable and connectors for a fully integrated, clean solution
- EMI shielding to combat external interference
- High-speed stamping and forming of internal metal components

Amphenol RF can deliver fully functional, custom-designed rapid prototypes in 6-8 weeks with capacity to support high-volume requirements around the world. Automotive camera backs are tested in accordance with USCAR standard. Addition testing may be performed by customer request.



PRODUCTS

Harness Side



AUTOMATE®
MINI-FAKRA



FAKRA



AUTOMATE® MINI-FAKRA
CABLE ASSEMBLIES



FAKRA CABLE
ASSEMBLIES



PCB Side



UD-AFI



SPC

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.