## RF INTERCONNECT SOLUTIONS FOR

# **HOME AUTOMATION**

As smart home devices and IoT technology becomes increasingly pravelent in daily life there is a pressing need to modernize traditional home infrastructure. Home auotomation introduces a new era of household management by integrating advanced sensors, connectivity solutions and Al-driven control systems in order to enhance convenience. This evolution demands updated communication protocols and innovative atomation components.

Amphenol RF provides a diverse range of interconnect solutions to facilitate seamless communication between smart devices and end-users. These versatile RF products support efficient energy management, personalized control and real-time monitoring to enable a connected living space.



## **TECHNOLOGIES**

- Wireless Communication (Wi-Fi, BT, Zigbee, Z-Wave)
- Cameras and Image Recognition
- **Smart Grid Technologies**
- **Robotics and Automation Systems**
- Artificial Intelligence (AI) and Machine Learning

#### **CORE COMPETENCIES**

- Waterproof IP67/68 sealed and extreme exposure solutions ideal for harsh environments
- Ruggedized products offering dust, vibration, and corrosion resistance
- Custom cable assemblies and sub-systems
- Customized high-speed board level interconnects
- Customized hybrid solutions supporting RF, signal and power

# **Home Automation Applications**

#### Wireless Controlled **Smart Home Appliances**

Wireless controlled smart home appliances enable remote monitoring and operation of household devices for enhanced convenience and efficiency.

- Smart hubs
- Voice assistants
- Smart appliances
- **Entertainment devices**

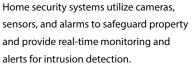




**Embedded Chip Antennas** 

FPC/PCB Antennas

#### **Home Security**



- **Smart locks**
- Video doorbell camera
- Security camera





FPC/PCB Antennas

External Antennas

#### **Home Robotics**

Home robotics employ autonomous machines to assist with tasks like cleaning and entertainment, enhancing the automation and funtionality of a smart home

- Robot cleaner
- Pet robot
- Lawn mowing robot
- Housework robot





NFC Antennas



# **Smart Energy Management**

Smart energy management optimizes heating, cooling, and power usage through intelligent systems, promoting energy conservation and cost savings.

- **Smart Lighting**
- Smart HVAC Management
- **Smart Utility Monitoring**





BNC

AMC

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|-------------------------------|-------------|---|--|
| SERIES                        | IMPEDANCE   | THE THE HATE WE   |  |
| AMC                           | 50 Ohm      | • • • •   |  |
| AMC4                          | 50 Ohm      |   |  |
| AUTOMATE Mini-FAKRA           | 50 Ohm      | •   |  |
| BNC                           | 50 & 75 Ohm | •   |  |
| FAKRA                         | 50 Ohm      | •   |  |
| HD-BNC                        | 50 & 75 Ohm | • •   |  |
| HD-EFI                        | 50 Ohm      | • •   |  |
| MCX                           | 50 & 75 Ohm | • • •   |  |
| MMCX                          | 50 Ohm      | • • •   |  |
| N-Type                        | 50 Ohm      | • • •   |  |
| SMA                           | 50 Ohm      | • • • •   |  |
| TNC/RP-TNC                    | 50 Ohm      | • • •   |  |
| External Antennas             | 50 Ohm      | • •   |  |
| FPC/PCB Antennas              | 50 Ohm      | • • •   |  |
| NFC Antennas                  | 50 Ohm      | • •   |  |
| <b>Embedded Chip Antennas</b> | 50 Ohm      | •   |  |

# **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.