Amphenol® RF

RF ANTENNA SOLUTIONS FOR -
WIRELESS APPLICATIONS

Radio frequency antennas are designed to support standard wireless protocols that enable IoT applications. These applications are part of a growing need for smart technology that improves efficiency, creates added convenience and streamlines workload.

Amphenol RF offers a broad portfolio of external and internal antennas in various configurations that meet the requirements of these necessary wireless protocols as convenient, off-the-shelf solutions.

Wireless Protocols

Wi-Fi

Wi-Fi, short for Wireless Fidelity, is a technology that allows electronic devices to connect to a wireless local area network (WLAN), typically using the 2.4 gigahertz (GHz) or 5 GHz radio frequencies. It enables internet access and data transfer without the need for physical cables, offering flexibility and convenience in connectivity.

ST1228-30-001-A
External Antenna

ST0228-30-502-A
External Antenna

5G/LTE

LTE, or Long-Term Evolution, is a standard for wireless broadband communication for mobile devices and data terminals. It provides high-speed data transmission, low latency, and improved spectral efficiency compared to previous cellular technologies.

ST0428-31-001-A
External Antenna

ST0457-20-001-A
External Antenna

Bluetooth

Bluetooth is a wireless technology standard used for exchanging data over short distances, typically between mobile devices, computers, and peripherals such as keyboards, mice, and headphones. It operates on the 2.4 GHz frequency band and facilitates convenient, low-power communication between devices.

ST0243-00-N02-B
Embedded Chip Antenna

ST0147-00-011-A
Chip Antenna

LoRa

LoRa (Long Range) is a low-power wide-area network (LPWAN) technology designed for long-range communication with low data rates between remote sensors and gateways. It enables efficient transmission of small packets of data over several kilometers, making it suitable for applications like IoT deployments and smart city initiatives.

ST0628-30-001-A
External Antenna

ST0628-40-501-B
External Antenna

UWB

Ultra-Wideband (UWB) is a wireless communication technology that utilizes a broad spectrum of frequencies to transmit data over short distances with high precision and low power consumption. It enables applications such as accurate indoor positioning, secure device authentication, and high-speed data transfer between nearby devices.

ST1124-00-401-A
FPC Internal Antenna

ST1124-11-401-A
FPC Internal Antenna

Zigbee

Zigbee is a low-power, low-data rate wireless communication protocol commonly used in IoT applications like smart home devices and industrial automation. It operates on the IEEE 802.15.4 standard and facilitates mesh networking, allowing devices to communicate with each other and form self-organizing networks.

ST0228-30-001-A
External Antenna

ST1225-20-001-A
Internal Antenna

RF Applications

- Mobile Phone (4G, LTE, 5G-FR1, WiFi, BT)
- Laptop/Tablet (4G, LTE, 5G-FR1, WiFi, BT)
- Access Point (WiFi, BT)
- Active/Switchable Antenna

- NFC Antenna (Wireless Charging)
- 5G-FR1, UWB
- FM Antenna
- CMMB Antenna

- Wireless Charged Antenna
- Automotive Antennas (Cellular, FM, WiFi, BT)
- GPS/GNSS Antenna

Learn more at amphenolrf.com/antennas