

# RF Interconnect for RF Modules and M2M Applications

# RF Interconnect for RF Modules

**Amphenol RF** is a leading interconnect supplier to manufacturers of radio frequency (RF) modules used in M2M applications. Our expertly engineered products provide superior RF performance for today's M2M technologies including wireless monitoring, mesh networking, telemetry systems, and automated industrial control applications. We also offer small form factor products ideal for wearable technology and IoT applications.



*AMMC*



*AMC*



*MMCX*



*MCX*



*FAKRA*



*SMA*



*TNC*



*Adapters*



*Cable Assemblies*

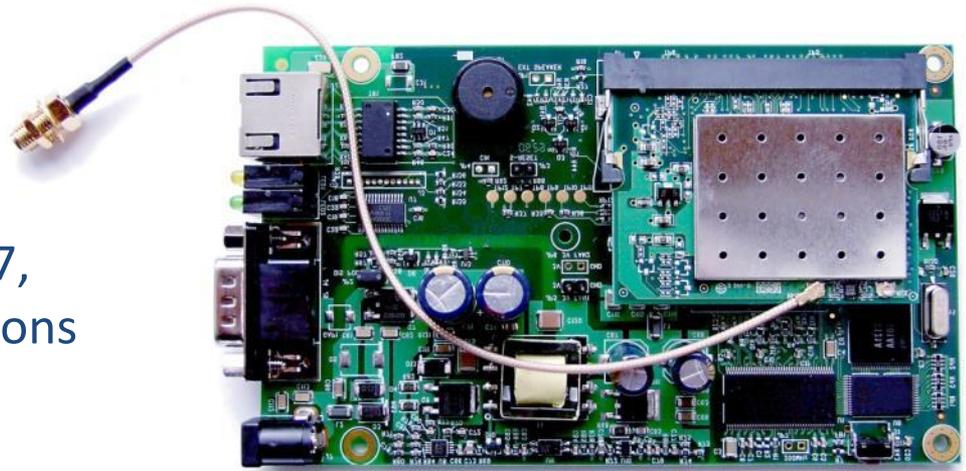
# The Internet of Things (IoT)

- M2M related technologies are already in place and the market has massive potential for growth.
- Operators, integrators and vendors have expressed the strong desire to standardize the end to end M2M service platform.



# Wireless Module Connections

- Specialize in getting from board to antenna
- SMA, SMB, and TNC connectors/adapters offered in IP67, IP68 in mated and unmated conditions
- PCB connectors available with integrated switch
- Jumpers available with microcoax, RG174, RG316
- Cable assemblies available for system integrators
- Custom cable assemblies and other solutions available



# M2M Applications

## FLEET MANAGEMENT

Cargo Tracking / Stock Management  
Temperature Control / Route Planning  
Order Tracking / Vehicle Diagnostics

## SECURITY & SURVEILLANCE

Public Surveillance / Assent Monitoring  
/Congestion & Movement Monitoring  
Urban Management

## TELEMETRY

Utility Meters / Parking Meters  
Industrial Meters / Elevators  
Vending Machines

## TELEMATICS / VEHICLE

Navigation / Traffic / Weather Info /  
Road Safety / Vehicle Diagnostics /  
Location Services

## HOME

Heating Control / Electrical Appliances  
Alarms & Security / Surveillance Cameras  
Garage & Garden

## SALES AND PAYMENT

POS Terminals / Vending  
Machines / Gaming &  
Entertainment / Kiosks

## SERVICE & MAINTENANCE

Industrial Machines / Vending  
Machines

## E-HEALTH

Patient Monitoring / Remote Diagnostics  
Activity Monitoring / Lifestyle Suggestions  
Personal Security



# Wireless LAN (WLAN)

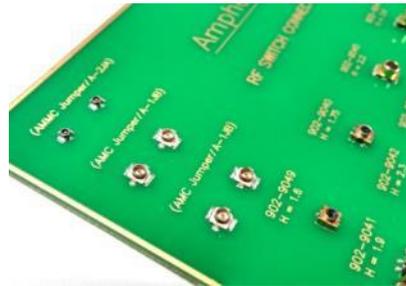
## Market Products

- Access Points
- Mobile Devices



## RF solutions

- AMC
- AMMC
- MCX
- MMCX
- SMA,RP-SMA
- Jumpers/Cable Assemblies



# RFID Market

## Market Products

- RFID Readers
- RFID Assemblies



## RF solutions

- AMC, AMMC
- MCX, MMCX
- TNC, RP-TNC
- FAKRA
- Jumpers/Cable Assemblies
- Gangmate Solutions



# Telematics/Fleet Management

## Market Products

- Asset Tracking
- Infotainment



## RF solutions

- AMC, AMMC
- MCX, MMCX
- SMA, RP-SMA
- TNC, RP-TNC
- FAKRA
- Jumpers/Cable Assemblies



# Industrial

## Market Products

- Payment Systems
- Security
- Medical



## RF solutions

- AMC, AMMC
- MCX
- MMCX
- SMB
- Jumpers



# Applications and Products Summary

Market	Applications	Product Solutions
Wireless LAN	Access Points Routers Modems Mobile Devices	AMC, AMMC MCX, MMCX SMA, RP-SMA Jumpers, Cable Assemblies
RFID	RFID Readers Stock Management Cargo Tracking	AMC, AMMC FAKRA MCX, MMCX TNC, RP-TNC Jumpers, Cable Assemblies
Telematics Fleet Management	Asset Tracking Industrial Meter Reading Navigation Systems Automotive Telemetry	AMC, AMMC FAKRA MCX, MMCX SMA, RP-SMA TNC, RP-TNC Jumpers, Cable Assemblies
Industrial	Payment Systems Security Networks Wireless Monitoring (E-Health)	AMC, AMMC MCX, MMCX SMB Jumpers, Cable Assemblies

# Electrical Specifications

Electrical Specifications					
Interface	AMMC	AMC	MMCX	MCX	SMA
Impedance	50 Ohm	50 Ohm	50 Ohm	50 or 75 Ohm	50 Ohm
Frequency Range	DC to 6GHz	DC to 6GHz	DC to 6GHz	DC to 6GHz	DC to 18GHz
Insulation Resistance	500 MΩ IN.	500 MΩ IN.	1,000 MΩ IN.	10,000 MΩ IN.	5,000 MΩ IN.
Contact Resistance	Center: ≤20mΩ Outer: ≤10mΩ	Center: ≤20mΩ Outer: ≤10mΩ	Center: ≤ 10mΩ Outer: ≤ 5mΩ	Center: ≤ 5mΩ Outer: ≤ 2.5mΩ	Center: ≤ 2mΩ Outer: ≤ 2mΩ
Dielectric W/standing Volt.	200 VRMS	200 VRMS	500 VRMS	1000 VRMS	1000 VRMS

# Thank You!

For more information, visit our website  
[www.amphenorlf.com](http://www.amphenorlf.com)