

# 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.







# 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



#### SALES AND PAYMENT

POS Terminals / Vending Machines / Gaming & Entertainment / Kiosks

#### **SERVICE & MAINTENANCE**

Industrial Machines / Vending Machines

#### **HOME**

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

#### **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









**Amphenol<sup>®</sup>RF** 



## RFID Market

#### **Market Products**

- RFID Readers
- RFID Assemblies





#### **RF** solutions

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



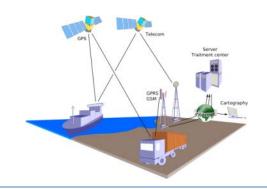




# Telematics/Fleet Management

#### **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	AMC, AMMC	
	Routers	MCX, MMCX	
	Modems	SMA, RP-SMA	
	Mobile Devices	Jumpers, Cable Assemblies	
RFID		AMC, AMMC	
	RFID Readers	FAKRA	
	Stock Management	MCX, MMCX	
	Cargo Tracking	TNC, RP-TNC	
		Jumpers, Cable Assemblies	
Telematics Fleet Management		AMC, AMMC	
	Asset Tracking	FAKRA	
	Industrial Meter Reading	MCX, MMCX	
	Navigation Systems	SMA, RP-SMA	
	Automotive Telemetry	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	ММСХ	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 ΜΩ ΙΝ.	10,000 MΩ IN.	5,000 MΩ IN.	
Contact Resistance	Center: $<=20m\Omega$ Outer: $<=10m\Omega$	Center: $<=20m\Omega$ Outer: $<=10m\Omega$	Center: $<= 10 \text{m}\Omega$ Outer: $<= 5 \text{m}\Omega$	Center: $<= 5m\Omega$ Outer: $<= 2.5m\Omega$	Center: $<= 2m\Omega$ Outer: $<= 2m\Omega$	
Dielectric W/standing Volt.	200 VRMS	200 VRMS	500 VRMS	1000 VRMS	1000 VRMS	



## Thank You!

For more information, visit <a href="https://www.mouser.com/amphenolrf/">www.mouser.com/amphenolrf/</a>

