

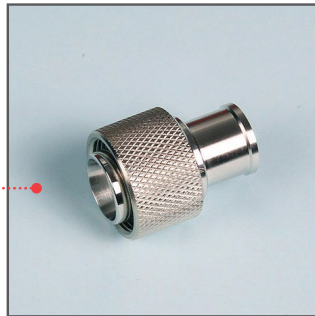
# 4.3-10 RF Connector Solutions for the Wireless Industry



Molex 4.3-10 RF Connector System and Cable Assemblies meet the performance needs of next-generation mobile network equipment, in a small form factor with best-in-class passive intermodulation (PIM) and less torque than current interfaces

## Features and Benefits

**30% smaller than DIN 7/16 connectors**  
Decreases operational expenditures by reducing tower loading



Vertical Hand-Tight Plug

**Low-PIM performance (160dBc @ 2x43dBm)**  
Enables wireless service providers to build networks capable of superior performance



Right-Angle Hand-Tight Plug

**Three mating options for right-angle and vertical plugs (hand tight, quick lock and wrench tight)**

Provides design flexibility, depending on application needs, without compromising electrical performance

**Serialized cables mean 100% data traceability**  
Enables quality assurance

**Patent-pending weatherproof boots**  
Protects connection in harsh weather. Ideal for outdoor cellular sites



Right-Angle Wrench-Tight Plug



Vertical Wrench-Tight Plug

**Interface already adapted by radio and antenna OEMs**

Base station equipment will be deployed with new 4.3-10 connectors

**Custom, factory-made low-PIM cable jumper assemblies (12.7mm [1/2"] coaxial cable, 9.53mm [3/8"] coaxial cable)**  
Eliminates a vendor and the need for the customer to assemble

## Applications

### Telecommunications/Networking

(Wireless Service Providers)

Network radio OEMs

Base station antennas

Signal optimization equipment



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## Specifications

### REFERENCE INFORMATION

Packaging: Tray, Carton  
UL File No.:  
CSA File No.:  
Mates with: series [73162](#) 4.3/10 Plugs mate with series [73162](#) Jacks  
Use with: Coaxial or Fit Cable:  
12.7mm (0.5") foam or flexible models  
Designed in: Millimeters  
RoHS: Yes

### ELECTRICAL

Voltage: 1800Vrms @ sea level  
Frequency (max.):  
DC to 12 GHz (Panel-Mount Jack)  
0 to 6 GHz (Plug)  
Impedance: 50 Ohms  
Dielectric Withstanding Voltage:  
2500V AC @ 0.5mA  
Contact Resistance:  
Center Contact:  $\leq 1$  milliohm  
Outer Contact:  $\leq 1$  milliohm  
Insulation Resistance:  $\geq 5000$  Megohms  
VSWR Ratio:  
 $\leq 1.03$  DC to 4 GHz  
 $\leq 1.05$  4 to 6 GHz  
RF Insertion Loss:  $\leq 0.05 \times \sqrt{f}$  (GHz) dB  
Center Contact Resistance:  $\leq 1$  milliohms  
Outer Contact Resistance:  $\leq 1$  milliohms  
PIM3 (Typical): -166dBc (2x43dBm)

### MECHANICAL

Mating Torque: 5 to 8nm  
Coupling Proof Torque: 8nm  
Coupling Nut Retention Force:  $\geq 450$ N  
Engagement Force (Quick Lock): 100N  
Disengagement Force (Quick Lock): 80N  
Durability: 100 Cycles  
Sealing: IP68

### PHYSICAL

Housing: Brass  
Contact: Phosphor Bronze  
Plating:  
Contact Area — Silver  
Insulator: Teflon  
O-Ring: Silicone Rubber  
Operating Temperature: -55 to +90°C

## Ordering Information

Series No.	Component	Mating Options	Orientation
<a href="#">73162</a>	4.3-10 Plugs and Jacks	Hand Tight, Quick Lock and Torque	Straight, Right Angle

Custom Product	Description
Contact Molex	4.3-10 Cable Jumper Assembly

[www.molex.com/link/4.3-10.html](http://www.molex.com/link/4.3-10.html)