

# 50 Ohm Connectors

#### **Features**

- Connects 1/2" air dielectric coaxial cable to N Male interface
- Threaded N Male interface ensures secure connection
- Compatible with 50 Ohm systems
- For Use with 1/2" AirCell® Plenum Cable
- · PIM Rated
- No Extra O-Rings or Gels Needed
- Fast & Easy Installation
- · Optimized for minimal signal loss and low VSWR
- Durable construction for long service life
- Supports Public Safety DAS systems





#### **Description**

The 50 Ohm cable connector is designed for use with 1/2" AirCell® Plenum Cable in public safety DAS installations. Its N Male interface provides a secure, low-loss connection with no need for additional O-rings or gels. PIM-rated for reliable signal transfer and minimal reflection. Return loss and VSWR remain stable across a broad frequency range (DC to 6 GHz), supporting consistent RF performance in mission-critical applications.

### **Return Loss and VSWR by Frequency Band**

Return Loss (VSWR)		
DC to 1 GHz	36 dB (1.03)	
1 GHz to 2.7 GHz	34 dB (1.04)	
2.7 GHz to 3.7 GHz	28 dB (1.08)	
3.7 GHz to 5 GHz	26 dB (1.10)	
5 GHz to 6 GHz	19 dB (<1.25)	
5 GHz to 6 GHz	15 dB (1.43)	

### **Technical Specifications**

Interface Type	N Male
Body Style	Straight
Impedance	50 Ohms
Frequency	0 MHz to 6 GHz
Dielectric Withstand Voltage	2 kV DC
PIM (2*43 dBm) 2x20 Watts	• ≤-155 dBc • Typical -160 to -165 dBc
Power	Average 0.6 kW     Peak/maximum10 kW
Insertion Loss	0.01 typical
Dielectric Withstanding Voltage	5000 M ohm
Contact Plating	Outer - Silver     Inner - Silver
Contact Resistance	• Center 1.0 M ohm • Outer 0.25 M ohm
Minimum Connector Pull-off Force	200 lbs
Recommended Temperatures	<ul> <li>Operating -40° to 158°F (-40° to 70°C)</li> <li>Storage -40° to 158°F (-40° to 70°C)</li> <li>Installation 23° to 122°F (-5° to 50°C)</li> </ul>

## **Ordering Information**

Model	Description	Stock No.
50 Ohm Connectors	For use with 1/2" 50 Ohm Plenum, Conduit, and In-Conduit Cables	3996130

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