

CONN007-1-W

N Plug Coaxial Cable Mount Connector

The CONN007-1-W is an N plug cable mount connector designed for use with RG-8, RG-8/U, LMR-400 or equivalent coaxial cable using the provided crimp ferrule and heat shrink tubing.
Operating from 0 GHz to 11 GHz, the CONN007- 1-W provides superior performance by utilizing white bronze plating to reduce distortion caused by passive intermodulation (PIM). Additionally, all Linx
connectors meet RoHS lead free standards and are tested to meet requirements for corrosion resistance, vibration, mechanical and thermal shock.

FEATURES

- 0 to 11 GHz operation
- White Bronze plating
  - Low Passive Intermodulation (PIM)
  - Superior corrosion resistance
- N plug (male pin) connection
  - Gold plated brass center contact
- Crimp type coaxial cable mount for use with
  - RG-8, Belden 9914
  - RG-8/U, Belden 9913
  - LMR-400
- Crimp ferrule and heat shrink tubing provided

ELECTRICAL SPECIFICATIONS

Impedance	50 Ω	
Frequency Range	0 to 11 GHz	
Voltage Rating	2500 V RMS	
Contact Resistance	Center: ≤ 1.0 mΩ Outer: ≤ 1.0 mΩ	
Selected Frequencies	2.4 GHz	6 GHz
Insertion Loss (dB max)	-0.17	-0.46
VSWR (max)	1.3	1.5

ORDERING INFORMATION

Part Number	Description
CONN007-1-W	N plug (male pin) crimp type coaxial cable mount connector for RG-8, RG-8/U, LMR-400, Belden 9914, Belden 9913 or equivalent coaxial cable

Available from Linx Technologies and select distributors and representatives.

ORDERING INFORMATION

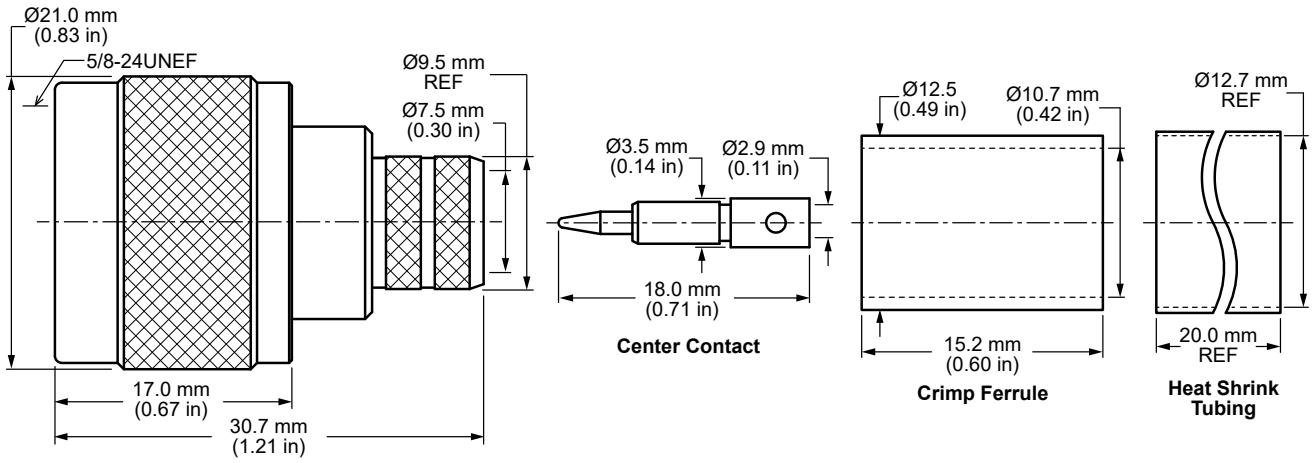


Figure 1: Product Dimensions for the CONN007-1-W Connector

CONNECTOR COMPONENTS

Model	CONN007-1-W	
Connector Part	Material	Finish
Connector Body	Brass	White Bronze
Center Contact (pin)	Brass	Gold
Insulator	PTFE	–
Gasket	Silicone	–
Crimp Ferrule	Brass	White Bronze
Heat Shrink Tubing	PE	–

COAXIAL CABLE INSTALLATION

The CONN007-1-W provides a crimp type coaxial cable retention system for installation to the connector using the provided crimp ferrule and heat shrink tubing. The coaxial cable trim dimensions are provided below in Table 1 for supported coaxial cable types, and recommended hex crimp tool sizes for CONN007- 1-W are shown in Table 2

TABLE 1. COAXIAL CABLE TRIM DIMENSIONS FOR THE CONN007-1-W CONNECTOR

Coaxial Cable Types	A	A2	B	C
RG-8, Belden 9914, RG-8/U, Belden 9913	3.0 mm (0.12 in)	n/a	7.5 mm (0.30 in)	15.5 mm (0.61 in)
LMR-400	3.0 mm (0.12 in)	1.0 mm (max)	7.5 mm (0.30 in)	15.5 mm (0.61 in)

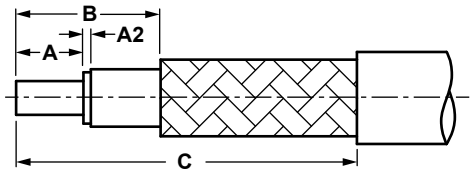


Figure 2: Recommended Hex Crimp Tool Sizes

Connector Part	Crimp Tool Size
Crimp Ferrule	10.9 mm (0.43 in)
Center Contact	3.0 mm (0.13 in)

CONNECTOR PERFORMANCE

Table 3 shows insertion loss and VSWR values for the CONN007-1-W connector at commonly used frequencies. Insertion loss is the loss of signal power (gain) resulting from the insertion of a device in a transmission line. VSWR describes how efficiently power is transmitted through the connector. A lower VSWR value indicates better performance at a given frequency.

TABLE 3. INSERTION LOSS AND VSWR FOR THE CONN007-1-W CONNECTOR

Band	Low-Band Cellular/ ISM/LPWA	Midband Cellular/ GNSS	WiFi/ISM	WiFi 6
Frequency Range	400 MHz to 960 MHz	1.1 GHz to 5 GHz	2.4 GHz	5 GHz to 7.125 GHz
Insertion Loss (dB max)	-0.07	-0.43	-0.17	-0.63
VSWR (max)	1.1	1.8	1.3	1.6

MECHANICAL SPECIFICATIONS

Model	CONN007-1-W
Mounting Type	Cable Mount (crimp type)
Fastening Type	5/8”-24UNEF Threaded Coupling
Interface in Accordance with	MIL-STD-348A
Recommended Torque	0.85 N m (7.5 ft lbs)
Coupling Nut Retention	100 lbs. min.
Connector Durability	500 cycles min.
Weight	34.9 g (1.23 oz)

ENVIRONMENTAL SPECIFICATIONS

MIL-STD/Method/Test Condition	
Corrosion (Salt spray)	MIL-STD-202 Method 101 test condition B
Thermal Shock	MIL-STD-202 Method 107 test condition B
Vibration	MIL-STD-202 Method 204 test condition B
Mechanical Shock	MIL-STD-202 Method 213 test condition I
Temperature Range	-60 °C to +165 ° C
Environmental Compliance	RoHS

PACKAGING INFORMATION

The CONN007-1-W connectors are individually packaged in a clear plastic bag. Connectors are packaged in cartons of 250 pcs. Distribution channels may offer alternative packaging options

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