

CONN008-W

N Panel Mount Jack Coaxial Connector

The CONN008-W is an N jack panel mount connector designed for use with RG-55, RG-142/U, RG-223, RG-400 or equivalent coaxial cable using the provided crimp ferrule and heat shrink tubing. Operating from 0 GHz to 11 GHz, the CONN008-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 jack (female socket) connection
 - Gold plated phosphor bronze center contact
- Crimp type coaxial cable mount for use with
 - RG-55, RG-142/U , RG-223, RG-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) | -0.18 | -0.35 |
| VSWR (max) | 1.2 | 1.3 |

Ordering Information

| Part Number | Description |
|------------------|---|
| CONN008-W | N jack (female socket) crimp type coaxial cable mount connector for RG-55, RG-142/U, RG-223, RG-400 or equivalent coaxial cable |

Available from Linx Technologies and select distributors and representatives.

Product Dimensions

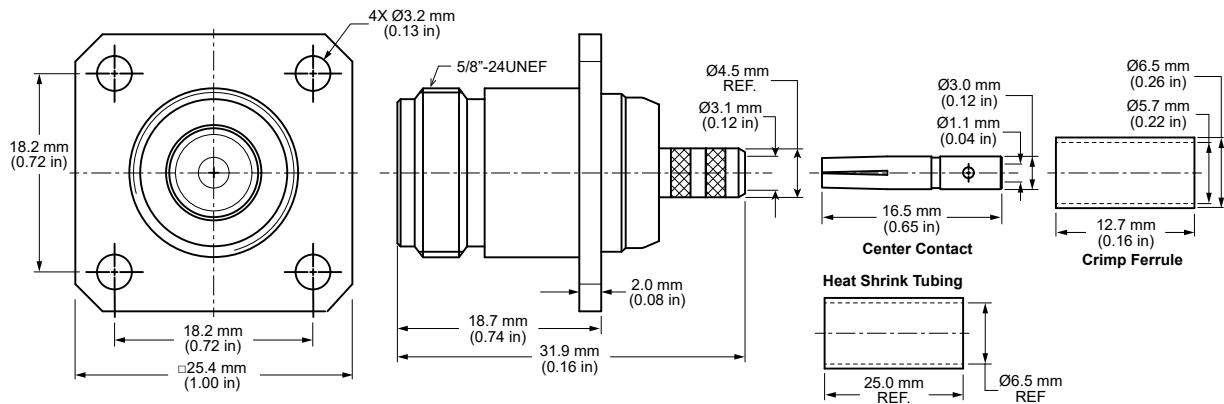


Figure 1. Product Dimensions for the CONN008-W Connector

Connector Components

| Model | CONN008-W | |
|-------------------------|-----------------|--------------|
| Connector Part | Material | Finish |
| Connector Body | Brass | White Bronze |
| Center Contact (socket) | Phosphor Bronze | Gold |
| Insulator | PTFE | - |
| Crimp Ferrule | Brass | White Bronze |
| Heat Shrink Tubing | PE | - |

Coaxial Cable Installation

The CONN008-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 CONN008-W are shown in Table 2.

Table 1. Coaxial Cable Trim Dimensions for the CONN008-W Connector

| Coaxial Cable Types | A | B | C |
|---------------------------------|------------------|------------------|-------------------|
| RG-55, RG-223, RG-142/U, RG-400 | 3.0 mm (0.12 in) | 7.5 mm (0.30 in) | 15.0 mm (0.61 in) |

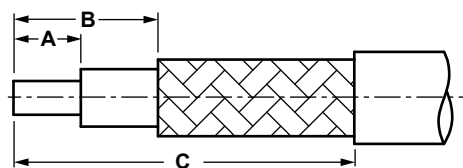


Table 2. Recommended Hex Crimp Tool Sizes

| Connector Part | Crimp Tool Size |
|----------------|--------------------|
| Crimp Ferrule | 5.41 mm (0.213 in) |
| Center Contact | 2.54 mm (0.100 in) |

Connector Performance

Table 3 shows insertion loss and VSWR values for the CONN008-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 CONN008-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) | -0.10 | -0.43 | -0.18 | -0.58 |
| VSWR (max) | 1.1 | 1.8 | 1.2 | 2.0 |

Mechanical Specifications

| Model | CONN008-W |
|------------------------------|-------------------------------|
| Mounting Type | Panel Mount |
| 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 | 34.1 g (1.20 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 CONN008-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.

Website: <http://linxtechnologies.com>
Linx Offices: 159 Ort Lane, Merlin, OR, US 97532
Phone: +1 (541) 471-6256
E-MAIL: info@linxtechnologies.com

Linx Technologies reserves the right to make changes to the product(s) or information contained herein without notice. No liability is assumed as a result of their use or application. No rights under any patent accompany the sale of any such product(s) or information.

Wireless Made Simple is a registered trademark of Linx Acquisitions LLC. Other product and brand names may be trademarks or registered trademarks of their respective owners.

Copyright © 2020 Linx Technologies

All Rights Reserved

Doc# DS20289-115CON

