18 GHz N, TNC, SMA
Connectors for IW Microwave Cable

Kings products, like the 18 GHz N, TNC, and SMA Connectors, are now sold under the Kings-Win™ brand from Winchester Interconnect™.

Product Description
Winchester Interconnect developed a family of Kings-Win precision stainless steel N, TNC, and SMA connectors designed for IW Microwave’s 1801, 2301, and 2801 series microwave cables.

These cables are all double shielded and feature IW Microwave’s proprietary method to apply even and concentric layers of PTFE lamination onto the center conductor, resulting in a cable that is lighter in weight, smaller in diameter, and has low attenuation.

Our 339 Series N, 338 Series TNC, and 087 Series SMA connectors were designed for these cables and perform to 18 GHz with a low VSWR of <1.17:1.

All connectors are easy to terminate and feature a solder center contact, solder sleeve to terminate the silver-plated copper foil and braid, and threaded front and rear bodies that are tightened together using a standard wrench.

• Our connector designs contain up to 50% fewer components and are faster to terminate compared to other connector options.
• Coupling nuts are available with and without lock wire holes for added reliability in high-vibration applications.
• The solder / clamp termination method ensures optimal electrical performance, achieving an overall cable assembly VSWR of <1.3:1.
Specifications

**Electrical**
- **Impedance**: 50 Ohms
- **Frequency Range**: DC to 18 GHz
- **Voltage Rating**: 500 Volts RMS
- **VSWR**: 1.17 Max DC to 18 GHz
- **Insertion Loss**: 0.06 x Vf (GHz) dB Max

**Material**
- **Body**: Stainless Steel Solder
- **Sleeve**: Brass
- **Center Contacts**
  - Male: Brass
  - Female: Beryllium Copper
- **Insulators**: PTFE
- **Gaskets & Seals**: Silicone Rubber (Viton® also available for Space apps)
- **Other Components**: Brass or Stainless Steel

**Finishes**
- **Body**: Passivated
- **Center Contacts**: Gold

**Mechanical**
- **Durability**: 500 Cycles Min

**Environmental**
- **Temperature Range**: -65°C to +165°C
- **Moisture Resistance**: MIL-STD-202, Method 106
- **Corrosion**: MIL-STD-202, Method 101, Test Condition B
- **Vibration**: MIL-STD-202, Method 204, Test Condition I

Part Numbers

<table>
<thead>
<tr>
<th>Connector Plug Type</th>
<th>IW Cable (Standard)</th>
<th>Standard Coupling Nut</th>
<th>Lock Wire Coupling Nut</th>
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