Environmentally sealed and weather-resistant, Phoenix’s Waterproof RF Connectors are designed to withstand severe atmospheric conditions and are rated to exceed IP67* and MIL-STD-202. Connectors feature rear-mount and front-mount designs, 4 standard cable groups, and superior mechanical and electrical performance.

Stainless steel bodies (passivated plating) available upon request. Please consult factory for your requirements.

Waterproof SMA (22 Series) Electrical and Environmental Specifications:
Impedance: 50 Ohms
Frequency Range: DC To 6 GHz (Cable Dependent)
Insulation Resistance: 5,000 Megohms
Temperature Rating: -65°C To +165°C
Vibration: MIL-STD-202, Method 204, Test Condition D
Thermal Shock: MIL-STD-202, Method 107, Test Condition B
Corrosion: MIL-STD-202, Method 101, Test Condition B, 5% Salt Solution
Moisture Resistance: MIL-STD-202, Method 106 (High Humidity And Heat)
Immersion: Exceeds IP67 (Unmated/Mated Conditions)

Waterproof TNC (41 Series) Electrical and Environmental Specifications:
Impedance: 50 Ohms
Frequency Range: DC To 6 GHz (Cable Dependent)
Insulation Resistance: 5,000 Megohms
Temperature Rating: -65°C To +165°C
Vibration: MIL-STD-202, Method 204, Test Condition B
Thermal Shock: MIL-STD-202, Method 107, Test Condition B
Corrosion: MIL-STD-202, Method 101, Test Condition B
Moisture Resistance: MIL-STD-202, Method 106 (High Humidity And Heat)
Immersion: Exceeds IP67 (Unmated/Mated Conditions)

*Consult factory for IP68 requirements.
Phoenix’s between series of Waterproof Adapters are designed for rugged environments. Our weatherproof adapters are used to securely connect UHF and GPS antennas, ensuring a constant waterproof seal between the outer antenna and the radio. Adapters exceed IP67* and can accommodate SMA, TNC, and MMCX interface types.

**WATERPROOF ADAPTERS**

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Adapter Connector Type</th>
<th>Sealed Condition</th>
<th>Body Material/Finish</th>
<th>Mounting Style</th>
<th>External Interface</th>
</tr>
</thead>
<tbody>
<tr>
<td>2233-1165-00N</td>
<td>SMA Jack to MMCX Jack Unmated/Mated Brass/Nickel Bulkhead Rear-Mount</td>
<td>SMA Jack</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2233-1180-00N</td>
<td>SMA Jack to MMCX Jack Unmated/Mated Brass/Nickel Bulkhead Front-Mount</td>
<td>SMA Jack</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3341-1115-00N</td>
<td>TNC Jack to MMCX Jack Unmated/Mated Brass/Nickel Bulkhead Rear-Mount</td>
<td>TNC Jack</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3341-1169-00N</td>
<td>TNC Jack to MMCX Jack Unmated/Mated Brass/Nickel Bulkhead Front-Mount</td>
<td>TNC Jack</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Stainless steel bodies (passivated plating) available upon request. Please consult factory for your requirements.

*Consult factory for IP68 requirements.

**WATERPROOF CABLE ASSEMBLIES**

The Phoenix Company of Chicago offers a variety of cable assemblies incorporating waterproof SMA or TNC connectors (front and rear-mount available) for reliable performance in extreme environments. These connectors can be terminated to a wide variety of cables such as RG-178, 1.13, 1.32, and 1.37mm diameters for tight-space applications requiring micro-miniature connectors.

<table>
<thead>
<tr>
<th>IP67 Connector</th>
<th>Cable Type</th>
<th>Length</th>
<th>Internal Connector</th>
</tr>
</thead>
<tbody>
<tr>
<td>SMA</td>
<td>1.13, 1.32, 1.37mm</td>
<td>4-12 in.</td>
<td>MMCX</td>
</tr>
<tr>
<td>SMA</td>
<td>RG-178</td>
<td>4-12 in.</td>
<td>MMCX</td>
</tr>
<tr>
<td>TNC</td>
<td>1.13, 1.32, 1.37mm</td>
<td>4-12 in.</td>
<td>MMCX</td>
</tr>
<tr>
<td>TNC</td>
<td>RG-178</td>
<td>4-12 in.</td>
<td>MMCX</td>
</tr>
</tbody>
</table>

Please consult Phoenix’s online “Waterproof Cable Assembly Part Numbering System Guide” to efficiently specify your requirements for a waterproof cable assembly in 4 simple steps. Visit [www.phoenixofchicago.com](http://www.phoenixofchicago.com) for more details.