

### Overview

Amphenol RF offers a wide selection of waterproof IP-rated TNC and RP-TNC connectors designed specifically for use in applications where systems may be compromised through exposure to the elements or external tampering. These products provide strong protection to secure against anything that may compromise system performance.

TNC and RP-TNC connectors operate at 50 ohms and utilize the familiar threaded interface which ensures mating stability and reliable electrical performance. This interface is available in a variety of configurations including front-mounted bulkhead jacks which can be fastened on the inside of a panel or enclosure, a design element which adds an extra layer of security for sensitive systems.

### Features and Benefits

- Waterproof IP67 rated
- Tamper resistant
- Threaded coupling mechanism
- Durable construction
- Available in a variety of configurations

### Applications

- Antennas
- Industrial
- Wireless
- Military
- Broadband

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For more information visit [www.amphenolrf.com](http://www.amphenolrf.com)  
 or call 800.627.7100

### Ordering Information

#### Connectors

##### Straight Plugs

| Part Number | Description                          |
|-------------|--------------------------------------|
| 122116-15   | TNC Straight Plug for RG-316         |
| 031-6923    | TNC Straight Plug for RG-58          |
| 122426-10   | TNC Straight Plug for RG-59 (75 Ohm) |
| 031-6499    | TNC Straight Plug for LMR-200        |
| 031-6683    | TNC Straight Plug for LMR-400        |
| 031-6502    | RP-TNC Straight Plug for LMR-200     |



##### Right-Angle Plugs

| Part Number | Description                         |
|-------------|-------------------------------------|
| 031-6501    | TNC Right-Angle Plug for LMR-200    |
| 031-6594    | TNC Right-Angle Plug for LMR-240    |
| 031-6501    | RP-TNC Right-Angle Plug for LMR-200 |



##### Bulkhead Jacks, Rear Mount

| Part Number | Description   |
|-------------|---|
| 122542      | TNC Straight Bulkhead Jack, Rear Mount, for 1.13 mm       |
| 122529-10   | TNC Straight Bulkhead Jack, Rear Mount, for 1.32 mm       |
| 122192-15   | TNC Straight Bulkhead Jack, Rear Mount, for RG-316        |
| 122358-10   | TNC Straight Bulkhead Jack, Rear Mount, for RG-316 DS     |
| 122370-11   | TNC Straight Bulkhead Jack, Rear Mount, for RG-178        |
| 031-6922    | TNC Straight Bulkhead Jack, Rear Mount, for RG-55         |
| 031-6732    | TNC Straight Bulkhead Jack, Rear Mount, for RG-58         |
| 122401-10   | TNC Straight Bulkhead Jack, Rear Mount, for RG-402        |
| 031-6288    | TNC Straight Bulkhead Jack, Rear Mount, for RG-405        |
| 031-6507    | TNC Straight Bulkhead Jack, Rear Mount, for LMR-200       |
| 031-6509    | TNC Right-Angle Bulkhead Jack, Rear Mount, for LMR-200    |
| 031-6921    | TNC Straight Bulkhead Jack, Rear Mount, for LMR-240       |
| 031-6600    | TNC Straight Bulkhead Jack, Rear Mount, Solder Cup        |
| 122542RP    | RP-TNC Straight Bulkhead Jack, Rear Mount, for 1.13 mm    |
| 031-6110    | RP-TNC Straight Bulkhead Jack, Rear Mount, for RG-316     |
| 122401RP-10 | RP-TNC Straight Bulkhead Jack, Rear Mount, for RG-402     |
| 031-6508    | RP-TNC Straight Bulkhead Jack, Rear Mount, for LMR-200    |
| 031-6510    | RP-TNC Right-Angle Bulkhead Jack, Rear Mount, for LMR-200 |



##### Bulkhead Jacks, Front Mount

| Part Number | Description   |
|-------------|---|
| 031-6907    | TNC Straight Bulkhead Jack, Front Mount, for 1.13 mm    |
| 031-6212    | TNC Straight Bulkhead Jack, Front Mount, for RG-316     |
| 122555      | TNC Right-Angle Bulkhead Jack, Front Mount, for RG-316  |
| 031-6900    | RP-TNC Straight Bulkhead Jack, Front Mount, for 1.13 mm |
| 031-6213    | RP-TNC Straight Bulkhead Jack, Front Mount, for RG-316  |



##### Jack, Free-Hanging

| Part Number | Description                                     |
|-------------|---|
| 031-6505    | TNC Straight Jack, Free-Hanging for LMR-200     |
| 031-6506    | RP-TNC Straight Jack, Free-Hanging, for LMR-200 |



##### PCB Bulkhead Mount

| Part Number | Description                                      |
|-------------|--|
| 031-6530    | TNC Straight PCB Bulkhead Mount, End Launch Jack |
| 031-6805    | TNC Straight PCB Bulkhead Mount, End Launch Plug |
| 031-6527    | TNC Right-Angle PCB Bulkhead Mount Jack          |
| 031-6528    | RP-TNC Right-Angle PCB Bulkhead Mount Jack       |



# Amphenol® RF

## Technical Specifications

| Electrical                      |                | TNC               | RP-TNC |
|---------------------------------|----------------|-------------------|--------|
| Impedance                       |                | 50 Ω              |        |
| Frequency Range                 |                | DC - 11 GHz       |        |
| Return Loss (VSWR)              |                | 1.3 (-18 dB) Max. |        |
| Dielectric Withstanding Voltage |                | 1500 VRMS Max.    |        |
| Insulation Resistance           |                | 5000 MΩ Min.      |        |
| Contact Resistance              | Center Contact | 1.5 mΩ Max.       |        |
|                                 | Outer Contact  | 0.2 mΩ Max.       |        |

| Mechanical     |          |
|----------------|----------|
| Coupling Style | Threaded |
| Mating Cycles  | 500 Min. |

| Environmental     |                             |
|-------------------|-----------------------------|
| Temperature Range | -65°C to +165°C             |
| RoHS              | Compliant with Exemption 6C |

| Materials               |                  |                  |  |
|-------------------------|------------------|------------------|--|
| Body and Outer Contacts | Brass            |                  |  |
| Male Contact            | Brass            | Beryllium Copper |  |
| Female Contact          | Beryllium Copper | Brass            |  |
| Crimp Ferrule           | Copper           |                  |  |
| Insulator               | PTFE             |                  |  |
| Gasket                  | Silicone         |                  |  |

Note: Technical specifications are typical and may vary by specific part number. See component drawing.

## Also Available

### Cable Assemblies, IP67

| Part Number     | Description  |
|-----------------|--|
| 095-850-220-XXX | TNC Straight Plug to TNC Straight Plug, LMR-200  |
| 095-850-221-XXX | TNC Straight Bulkhead Jack to TNC Straight Plug, LMR-200                                 |
| 095-850-222-XXX | TNC Straight Bulkhead Jack to TNC Right-Angle Plug, LMR-200                              |
| 095-950-264-XXX | TNC Straight Front Mount Bulkhead Jack to AMC Right-Angle Plug, 1.13mm Micro-coax        |
| 336209-12-XXXX  | TNC Straight Bulkhead Jack to AMC Right-Angle Plug, 1.13mm Micro-coax                    |
| 336212-12-XXXX  | RP-TNC Straight Bulkhead Jack to AMC Right-Angle Plug, 1.13mm Micro-coax                 |
| 095-950-263-XXX | RP-TNC Straight Front Mount Bulkhead Jack to AMC Right-Angle Plug, 1.13 Cable Micro-coax |

### Bulkhead Mount Adapters, IP67

| Part Number   | Description          |
|---------------|----------------------|
| 242178-10     | SMA Jack to TNC Jack |
| 031-6769      | MCX Jack to TNC Jack |
| AD-TNCJTNCJ-1 | TNC Jack to TNC Jack |

### Protective Cap, IP67

| Part Number | Description                                  |
|-------------|--|
| 202101-12   | TNC/RP-TNC Protective Cap Plug Without Chain |

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