

# **IP67 TNC and RP-TNC Product Series**

# **Waterproof IP-Rated and Tamper Resistant Interface**

## **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

# **Amphenol RF**Four Old Newtow

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For more information visit 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





# **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 VRI	MS Max.
Insulation Resistance		5000 M	IΩ Min.
Contact Resistance	Center Contact	1.5 mΩ	Ω Max.
	Outer Contact	0.2 mg	) Max.

### Mechanical

Coupling Style	Threaded
Mating Cycles	500 Min.

#### **Environmental**

Temperature Range	-65°C to +165°C
RoHS	Compliant with Excemption 6C

### Materials

Body and Outer Contacts	Br	Brass	
Male Contact	Brass	Beryllium Copper	
Female Contact	Beryllium Copper	Brass	
Crimp Ferrule	Сој	Copper	
Insulator	PI	PTFE	
Gasket	Silio	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
095-850-281-XXX	TNC Straight Front Mount Bulkhead Jack to AMC4 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
095-850-282-XXX	RP-TNC Straight Front Mount Bulkhead Jack to AMC4 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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