

Connectors Optimized for Low Loss Cables

SMA, TNC & N-Type Connectors for Low Loss 195, 240 & 400

Overview

Redesigned SMA, TNC & N-Type connectors optimized for use with Low Loss cables. Low Loss cables provide enhanced shielding with a bonded foil construction ensuring 100% coverage. The connectors feature a nominal impedance of 50 ohms and offer low return loss from DC to 6 GHz. They are available in straight jack, bulkhead jack, straight plug and right angle plug configurations. All designs feature a crimp termination, allowing for quick and secure assembly, and require standard hex crimp tooling.

The new and improved connectors provide consistent electrical performance at high frequencies and feature improved grounding for more stable RF performance. They are ideal for smart city infrastructure and other IoT antenna applications requiring high reliability and low signal loss. SMA, TNC & N-Type connectors for Low Loss 195, 240 & 400 cables can also be found in medium to high power wireless, iDAS and oDAS solutions.

Features and Benefits

- · Quick and secure assembly
- · Improved grounding
- · Enhanced shielding
- Low signal loss

Applications Smart City Wireless IoT Telecommunication

Amphenol RF

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For more information visit **www.amphenolrf.com** or call 800.627.7100

Ordering Information





N-Type Plug

Part Number	Description
172380	N-Type Right Angle Crimp Plug for Low Loss 195
172381	N-Type Straight Crimp Plug for Low Loss 195
172384	N-Type Straight Crimp Plug for Low Loss 195
172385	N-Type Right Angle Crimp Plug for Low Loss 240
172395	N-Type Straight Crimp Plug for Low Loss 240
172386	N-Type Straight Bulkhead Jack for Low Loss 240
172394	N-Type Straight Crimp Jack for Low Loss 240
082-6641	N-Type Right Angle Crimp Plug for Low Loss 400
082-6642	N-Type Straight Crimp Plug for Low Loss 400
082-6643	N-Type Straight Bulkhead Jack for Low Loss 400
082-6644	N-Type Straight Crimp Jack for Low Loss 400





SMA Plug

Part Number	Description
132443	SMA Straight Crimp Plug for Low Loss 195
132444	SMA Right Angle Crimp Plug for Low Loss 195
132454	SMA Straight Bulkhead Jack for Low Loss 195
132451	SMA Straight Crimp Plug for Low Loss 240
132452	SMA Right Angle Crimp Plug for Low Loss 240
132453	SMA Straight Crimp Jack for Low Loss 240







Part Number	Description
031-6821	TNC Straight Crimp Plug for Low Loss 195, Low Loss 195
031-6822	TNC Right Angle Plug for Low Loss 195, Low Loss 195
031-6823	TNC Straight Crimp Jack for Low Loss 195, Low Loss 195
031-6824	TNC Right Angle Jack for Low Loss 195, Low Loss 195
031-6825	TNC Straight Crimp Plug for Low Loss 240, Low Loss 240
031-6826	TNC Right Angle Plug for Low Loss 240, Low Loss 240
031-6827	TNC Straight Crimp Jack for Low Loss 240, Low Loss 240
031-6828	TNC Right Angle Jack for Low Loss 240, Low Loss 240



Technical Specifications

Electrical

		SMA	N-Type	TNC
Impedance		50 Ω		
Frequency Range		DC – 6 GHz		
Return Loss		1.2:1 Max. 1.2:1 Max. 1.3:1 Max.		
Dielectric Withstanding	y Voltage	1000 VRMS Min. 2500 VRMS Min. 1000 VRMS Min.		
Insulation Resistance		5000 MΩ Min.		
Contact Resistance	Center Contact	2.0 mΩ	1.0 mΩ	1.5 mΩ
	Outer Contact	2.0 mΩ	$0.2~\text{m}\Omega$	0.2 mΩ

Mechanical

Mating	Threaded
Mating Cycles	500 Cycles Min.

Environmental

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

Materials

	SMA	N-Type	TNC
Body and Outer Contacts	Brass, Gold Plated	Brass, White Bronze Plated	Brass, Nickel Plating
Male Center Contact	Brass, Gold Plated*	Brass, White Bronze Plated	BeCu, Gold Plating
Female Center Contact	BeCu, Gold Plated	Phosphor Bronze, Gold Plated	Brass, Gold Plating
Crimp Ferrule	Brass, Gold Plated*	Copper, White Bronze Plated	Seamless Copper, Nickel Plating
Insulator	PTFE	PTFE	PTFE

^{*}Technical specifications are typical and may vary by specific part number. See component drawing for additional information.