

Inside RF Industries

A Letter of News and New Products – Issue 1, 2015



We Stock the Components for Your WiFi Applications

Wireless hardware is manufactured with connectors that meet Wi-Fi IEEE802.11a/b/g/n/ac requirements and, where applicable, satisfy FCC Part 15 and 802.11 regulations.

RF Industries offers connectors, adapters and cable assemblies meeting your Wi-Fi requirements. Whether you need standard 7-16 DIN, QMA, N, BNC, TNC, MCX, MMCX, SMA, SMB, SSMB interface components, or more specialized connector interfaces for your device, you will find the right product available from our San Diego warehouse. To satisfy FCC Part 15 and 802.11 requirements, some devices are made using reverse gender or reverse thread connectors for input and output. Reverse polarity, or gender, connectors have been the most popular way to achieve this. RF Industries stocks reverse polarity BNC, MCX, MMCX, N, SMA, SMB, SSMB and TNC connectors, adapters and jumpers. Another method to comply is to use reverse, or left-handed thread connectors.

Listed below is a small selection of our most requested reverse gender and reverse thread connectors. These are but a few of the much larger list found in our catalogs and on our website.



FCC Part 15 Connectors									
Description	Bdy	P/C	Die	Part #	Fig				
Rev Polarity TNC Male, Crimp, for LMR®-195	Ν	G	Т	RP-1202-C	1				
Rev Polarity TNC Male, Crimp, for LMR®-400	Ν	G	Т	RP-1202-I	2				
Rev Thread TNC Male, Crimp, for LMR®-400	Ν	G	Т	RT-1202-I	2				
Rev Polarity TNC Male, Crimp (fem contact), for LMR $^{\ensuremath{\circledast}}$ -400	Ν	G	Т	RP-1202-X	1				
Rev Polarity TNC Female, Crimp, for RG-58	Ν	G	Т	RP-1212-C	3				
Rev Polarity SMA Male, for LMR®-100A	G	G	Т	RP-3000-1B	4				
Rev Polarity SMA Male, for LMR®-100A	Ν	G	Т	RP-3000-B	4				
Rev Polarity SMA Male, for LMR®-195	G	G	Т	RP-3000-1C	5				
Rev Thread SMA Male, for LMR®-195	G	G	Т	RT-3000-1C	5				
Rev Polarity SMA Male, for LMR®-195	Ν	G	Т	RP-3000-C	5				
Rev Polarity, Rev Thread SMA Male, for LMR®-195	Ν	G	Т	RPT-3000-C	5				
Rev Polarity SMA Male, Right-Angle, for LMR®-195	G	G	Т	RP-3010-1C	6				
Rev Polarity SMA Female, for LMR®-100A	G	G	T	RP-3050-1B	7				
Rev Polarity SMA Female, for LMR®-195	G	G	Т	RP-3050-1C	8				
LMR is a registered trademark of Times Microwave Systems N=Nickel, G=Gold, T=PTFE									

Cable assemblies too! See inside.

FCC Part 15 Adapters								
	Description		Bdy	P/C	Die	Part #	Fig	
Rev Thread TNC	Plug to Rev Thread TNC Fem	ale Right-Angle	N	G	Т	RT-1227	9	
Rev Pol	arity TNC Plug to Standard N	I Jack	N	G	Т	RP-1234	10	
Rev Polari	ty SMA Plug to Standard SN	/IA Jack	N	G	Т	RP-3405	11	
Rev Pola	arity SMA Plug to Standard N	N Jack	N	G	Т	RP-3452	12	
13	14 WiFi	15 Adapter	Kits	1 6			17	
	Description				Pa	art #	Fig	
f	6-Piece 7-16 DIN to N Adapters, Silver Plated				RFA-4013		13	
6-piece 7-16 DIN to N Adapters, White Bronze Plating with Stainless Steel Hex Nuts				k Nuts	RFA-4013-SS		13	
31-Piece Unidapt [™] WiFi Testing Kit, includes Rev Polarity MMCX, SMA, TNC, Male and Female Adapters and Unidapt Cable Tester, Silver Plated				Male	RFA-4018-WIFI		14	
43-Piece Expanded Classic Unidapt Kit, includes Rev Polarity MMCX, SMA, TNC, Male and Female Adapters, Silver Plated			INC,	RFA-4023-01-WIFI		15		
30-Piece Classic Unidapt Kit, includes Rev Polarity MMCX, SMA, TNC, Male and Female Adapters, Silver Plated				and	RFA-4	4024-WIFI	16	

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fax: 858-549-6345

Unidapt is a trademark of RF Industries

32-Piece Unidapt[™] WiFi Testing Kit, includes Rev Polarity MMCX, SMA, TNC, Male and Female Adapters, Silver Plated; Unidapt Cable Tester and Cat 5 Cable Tester

RFA-4028-WIFI

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We Build the Cable Assemblies for Your WiFi Applications

Cable assemblies are available with short turnaround times in any configuration you might need to connect your wireless device. We have listed a few popular ones below.

	FCC Part 15 Cable Assemblies	
	Description	Part #
k –	Rev Polarity SMA Male Gold to N Female Bulkhead, RG-142/U	RFW-0995-XX
	Rev Polarity SMA Male to Rev Polarity SMA Female Bulkhead, RG-58A/U	RFW-3183-XX
	Rev Polarity TNC Plug to Standard N Male, LMR®-195	RFW-5926-XX
	Rev Polarity TNC Plug to Rev Polarity TNC Plug, LMR®-195	RFW-10465-XX
	Rev Polarity SMA Gold Plug Right-Angle to N Female Bulkhead, LMR $^{ m s}$ -195 cable	RFW-10648-XX
	Rev Polarity TNC Plug to Standard N Male, LMR®-200	RFW-11419-XX
	IMR is a registered trademark of Times Microwaye Systems	^

LMR is a registered trademark of Times Microwave System XX = custom length

Custom BNC Bulkhead Adapter Meets IP67 & IP68 Weatherproof Requirements

The BNC connector interface is widely used in a multitude of applications although its design originated



in the 1940s. The basic design originally offered minimal weather protection in the mated condition and almost no protection when unmated.

Aviel Electronics, a division of RF Industries, designed a BNC bulkhead adapter incorporating a glass bead that hermetically seals the connector to withstand a 100 PSI leak test. The adapter, Aviel model # Z-1142, may be used in IP67 or IP68 applications in the mated and unmated condition. All interface dimensions are designed to IAW MIL-C-39012 specifications and overall dimensions to UG-492D/U specification. The adapter is manufactured with silicon gaskets, silver plated brass body and gold plated center contacts. The adapter is 50 ohm impedance and rated at DC to 4 GHz with low reflection (VSWR). The adapter is also

available in custom outline dimensions to meet customer requirements for special applications.

Contact the factory with your specific requirements at (877) 805-7381 or (702) 739-8155, email aviel@rfindustries.com, or visit www.avielelectronics.com.



Major League Baseball Stadiums — Who is winning with DAS?



Trivia Answer

Major League Baseball stadiums: Who is winning with DAS?

During the season opening series, Arlington Texas, home of the Rangers, wow with 655GB traffic on their AT&T DAS network. The St. Louis Cardinals were in 2nd with 466GB, and 3rd place went to the Los Angeles Dodgers with 396GB. *Photo: Ranger Stadium*

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Expanded LMR[®] Cable Cross References Make Shopping Easier



RF Industries makes it easier than ever for you to find the connectors you need for Times LMR® and equivalent cables. Our expanded LMR® <u>Cable-to-</u> <u>Connector Cross References</u> are available on our website or by contacting RF Industries. Our cross references list our connectors for the most popular LMR® cables in easy-to-read format, with primary specifications and real-size photograph.

RF Industries designs and manufactures the connectors you need for the cables you use, including your most useful interfaces from MMCX to 7-16 DIN. We also offer newer interfaces, like QMA and 4.1-9.5 (Mini) DIN, and connectors with white bronze plating and stainless steel hex nuts.

LMR is a registered trademark of Times Microwave Systems.

<u>Cables include:</u> LMR®-100 LMR®-195 LMR®-200 LMR®-240 LMR®-300 LMR®-400 LMR®-600 and LLPL™

Plenum Rated Assemblies Cable Ship with Short Lead Times

Because of our huge inventory of connectors and cable, RF Industries ships your cable assemblies using LMR® cables—whether standard or plenum, regular or low PIM—with short lead times.







PLENUM ASSEMBLY SPECIFICATIONS

Times SPP-250-LLPL[™] Cable

Excellent PIM performance < -155dBc

UL910 plenum rated

Highly flexible and bendable

Low loss

Operating frequency up to 6 GHz

Corrugated copper outer conductor, providing greater than 100dB RF shielding

Times TFT-402-LF[™] Cable

Excellent PIM performance < -155dBc UL910 plenum rated Highly flexible flat braided outer conductor Low loss Cost effective alternative to semi-flexible solder braided cables

Operating frequency up to 3 GHz

Times LMR® LLPL Cable

UL/NEC/CSA rated CMP/FT6

- Highly flexible and bendable
- Low loss

Operating frequency up to 5800 MHz







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Low PIM Products for DAS from RF Industries Now Available on iBwave Design

iBwave Design, the software standard for in-building wireless network design, now lists over 100 of RF Industries' low PIM products for Distributed Antenna Systems (DAS). The products include low PIM, plenum rated cables assemblies, splitters, couplers, loads and coaxial adapters, 7-16 DIN, 4.1-9.5 (Mini) DIN and QMA. Contact our Sales Department for a catalog of products or visit our website at www.rfindustries.com



Visit Us at the Show



DAS & Small Cells Congress June 8-9, New Orleans



Northeast DAS July 15, Boston



INSIDE **AF** INDUSTRIES

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