



STANDARD, CUSTOM, AND HIGH PERFORMANCE CABLE ASSEMBLIES

COAXICOM manufactures a broad line of standard and custom flexible, semi-rigid, and Ultra-Flex cable assemblies. Low loss, high performance cables, as well as ruggedized assemblies suitable for production environments are also available. Standard and custom flexible cable assemblies can be supplied using virtually all of the common RG Type Cables. We also manufacture assemblies using industry standard cables such as the LMR series from Times, and application-specific cables from Belden. Virtually all connector series and combinations are offered, consistent with the size of the cable selected.

FLEXIBLE CABLE ASSEMBLIES

For quoting purposes, initial assembly part numbers for flexible cable can be generated by the customer using the following format:

XXXX-YYY-ZZZZ-L

XXXX, ZZZZ: First 4 digits of connector part numbers shown in this catalog.

YYY: 2 or 3 digit RG (or other) cable designation

L: Cable length in inches.

For Example, an RG-316 cable, 36" long with an SMA male plug on one end, and an SMB plug on the other end would be designated as: 3089-316-6423-36. For reverse-polarity connectors, add a "RP" suffix to the connector part number. For connectors not shown in this catalog, consult factory.

ULTRA-FLEX AND SEMI-RIGID CABLE ASSEMBLIES

The COAXICOM Cable Assembly Department manufactures semi-rigid and Ultra-Flex cable assemblies from user supplied sketches, prints, or bent samples to facilitate fast turnaround. Our semi-rigid cables utilize MIL-C-17 approved material with a soft OFHC copper outer jacket to allow the cable to be formed and re-formed after the connectors have been installed. Tin-plated or silver plated copper jackets, as well as aluminum jackets are also available. Ultra-Flex is a

hand-formed alternate to semi-rigid. It offers the same electrical characteristics as the corresponding semi-rigid, but the solid outer jacket is replaced with a copper-tin filled braid. This results in an extremely flexible assembly, which can be shaped and reshaped by hand without tooling. Both semi-rigid and Ultra-Flex cable assemblies are available in all standard diameters from .047" to .325". COAXICOM also manufactures .085" and .141" diameter phase adjustable semi-rigid or Ultra-Flex cable assemblies, using the 3993 series of adjustable SMA male connectors.

Part number construction for standard semi-rigid and Ultra-Flex cable assemblies is similar to that described for flexible assemblies. A 24" assembly using .141" semi-rigid with an SMA jack on one end and a phase-adjustable SMA plug on the other end is 3183-402-3993-24. The same assembly using .141" Ultra-Flex is a 3183-402UF-3993-24.

SMA cable plugs for .141" semi-rigid cable are available with or without a center contact. The 3183 connector was chosen over the 3207 connector for the above assembly because it uses the cable center conductor as the male contact pin to provide optimum performance by minimizing discontinuities. The same is true when using .085" semi-rigid with the SSMA plugs.

HIGH PERFORMANCE, AND DURABLE TEST CABLES

COAXICOM high performance cables include low loss designs for receiving systems, and high power low loss types for transmission applications. We also offer durable assemblies for use in challenging production test environments. Summarized below are some examples of what we can offer. They are available using all the appropriate connector series including N, BNC, TNC, SMA, 7/16, 7 mm, 3.5 mm, 2.9 mm and 2.4 mm consistent with the frequency of operation.



Cable Type	Loss @18 GHz	Avg. Power @ 1 GHz	Max. Frequency
5120S (Solid CC)	0.42 dB/ft.	800 Watts	32 GHz
5130S (Solid CC)	0.27 dB/ft.	800 Watts	18 GHz
5285* (Stranded CC)	0.65 dB/ft.	400 Watts	40 GHz
5190 (Stranded CC)	0.41 dB/ft.	2 KW	26.5 GHz
5290 (Stranded CC)	0.30 dB/ft.	400 Watts	19 GHz
5305 (Solid CC)	0.27 dB/ft.	4 KW	18 GHz

* Durable Bench Test Cable