



Custom Coax cable assemblies

Cable Assemblies & Connectors

- Custom RF cable assemblies built to order
- Variety of styles & connectors available
- Provides extension capability to standard antennas configurations

Mobile Mark manufactures custom cable assemblies. All cable assemblies/ connectors are 50 Ohm. Standard production lead times apply (typically 2 weeks).

RG-174 (8216) is a very small (approximately 0.1"/2.5 mm) flexible cable best suited for mobile/portable applications up to 1900 MHz. It can be used in short runs up to 2.7 GHz. For miniature sized connectors it has the widest options available, but this cable type has higher loss.

LMR-100A is the low loss alternative for RG-174. It has the same size diameter (0.1 inch or 2.5 mm) and can be used with the same range of connectors. Because it is lower loss than RG-174, this cable can be used with confidence for longer distances or for higher frequencies than the parameters called out for RG-174. The cable is well shielded but is still flexible and easy to handle.

RG-58 (8240) is the work horse cable and is suitable for applications up to 2.7 GHz. Approximately 0.2 inch in diameter (5mm), it accommodates the widest variety of connectors and provides reasonable losses. It is best suited for cable runs under approximately 20ft (6 meters).

RF-195 (7806R) is the same size cable as RG-58, and uses the same size connectors, with the added feature of lower "per foot" cable losses. RF-195 would be suitable for cable runs over 15 ft (4.5 meters) or in high frequency applications up to 6 GHz. This is our standard cable for applications above 2.5 GHz.

LMR-195FR is a non-halogen (non-toxic), low smoke, fire retardant cable. It has the same diameter as RF-195, can be fitted with the same variety of connectors, and has the same per foot cable loss. Longer lead times may apply.

RF-240 (7808R) is a lower loss cable than RF-195 and best suited for longer cable runs from 20 ft - 50 ft (6 meters - 15 meters) as well as for higher frequency applications up to 6 GHz or more. Approximately 0.25" diameter (6 mm) it is still well suited for mobile applications, particularly at higher frequencies.

LMR-400 is suitable for long runs & higher frequency applications. In many such applications, it is the only practical cable to use. Approximately 0.405" diameter (10 mm), it might be too large for some mobile installs, but is perfect for every base station transmitter or access point. Longer lead times may apply.

LMR-600 is the lowest loss cable we offer. It is a premium low loss cable. At 5 GHz, the loss is 30 dB less than RG-58 for a 100 ft cable run. It is suitable for base station installations where the antenna may be mounted on a tower with long runs of cable. Its larger size results in connectors that are a little unique than those for other cable sizes. Longer lead times may apply.

Mobile Mark offers a wide range of connectors for the various cable sizes and styles. Some of the available connectors are pictured below.

Specifications

Common Cable Type	Loss per ft @ 900 MHz	Loss per ft @ 2000 MHz	Loss per ft @ 2500 MHz	Loss per ft @ 5000 MHz
RG-174	0.32 dB	0.49 dB	0.55 dB	NR
LMR-100A	0.22 dB	0.30 dB	0.39 dB	0.50 dB
RG-58	0.14 dB	0.21 dB	0.24 dB	0.43 dB
RF-195	0.10 dB	0.15 dB	0.17 dB	0.25 dB
LMR-195FR	0.10 dB	0.15 dB	0.17 dB	0.25 dB
RF-240	0.07 dB	0.10 dB	0.12 dB	0.17 dB
LMR-400	0.04 dB	0.06 dB	0.07 dB	0.12 dB
LMR-600	<.01 dB	<.01 dB	<.01 dB	0.10 dB

Note: Loss per ft is equivalent to loss per 30 cm.

