

RF Coaxial Cable Comparison

LMR® and equivalent Coaxial Cable Types*

| Type | Conductor Dia. | Cond. Type | Impedance | Wt (lbs/ft) | VOP ¹ | O.D. | Attenuation** |
|-----------|----------------|------------|-----------|-------------|------------------|--------|---------------|
| LMR-100A | .018" | Solid | 50 Ohm | .015 | 66% | .100" | 38.0 dB |
| LMR-195 | 20 AWG | Solid | 50 Ohm | .021 | 83% | .195" | 18.6 dB |
| LMR-200 | .044" | Solid | 50 Ohm | .022 | 83% | .200" | 16.5 dB |
| LMR-240 | .059" | Solid | 50 Ohm | .034 | 84% | .240" | 12.6 dB |
| LMR-300 | | Solid | 50 Ohm | .055 | 84% | .3" | 10.0 dB |
| LMR-400 | .109" | Solid | 50 Ohm | .068 | 85% | .405" | 6.61 dB |
| LMR-400UF | .109" | Stranded | 50 Ohm | .09 | 85% | .405" | 7.9 dB |
| LMR-500 | .142" | Solid | 50 Ohm | .097 | 86% | .5" | 5.4 dB |
| LMR-600 | .176" | Solid | 50 Ohm | .131 | 87% | .59" | 4.4 dB |
| LMR-600UF | .176" | Stranded | 50 Ohm | .131 | 87% | .59" | 5.1 dB |
| LMR-900 | | Solid | 50 Ohm | .266 | 87% | .870" | 2.9 dB |
| LMR-1200 | .349" | Solid | 50 Ohm | .448 | 88% | 1.2" | 2.2 dB |
| LMR-1700 | .527" | Solid | 50 Ohm | .736 | 89% | 1.670" | 1.7 dB |

LMR® and TFlex® are registered trademark of Times Microwave Systems.

Other Related Cable Types and their Substitution / Replacement. *

| Type | Center Conductor | Cond. Type | VOP ¹ | O.D. | Replacement |
|-----------|------------------|------------|------------------|-------|-------------|
| RG-174/U | 7x (.0063") | Stranded | 65% | .100" | LMR-100A |
| RG-316/U | 7x (.0067") | Stranded | 68% | .110" | LMR-100A |
| RG-58/U | 20 AWG | Solid | 66% | .195" | LMR-195 |
| RG-58A/U | 19x (.0071") | Stranded | 65% | .195" | LMR-195 |
| RG-58C/U | 19x (.0071") | Stranded | 65% | .195" | LMR-195 |
| RG-59CATV | 22 AWG | Solid | 78% | .242" | |
| RG-6 CATV | .040" | Solid | 82% | .300" | |
| RG-8X | | Stranded | 78% | .242" | LMR-240 |
| RG-213 | 13(7x.0296) | Stranded | 65% | .405" | LMR-400 |
| RG-214/U | 13(7x.0296) | Stranded | 66% | .405" | LMR-400 |

Cable Terms

| | |
|-----|---|
| DB | Direct Burial |
| UF | Ultra Flex (Stranded Center Conductor) |
| PE | Poly Ethylene (Standard LMR Cable Jacket) |
| TPR | Thermo Plastic Rubber (NOT Buriable) |

Notes

- Some LMR Cables are available in 75 Ohm Impedance for up-links, etc.
- Do NOT use RG58 if the RF feed line to the antenna is longer than 25ft., or if the actual attenuation of the cable is not known or unacceptable.

** The exact figures on all of these cables may vary by manufacturer. They are listed here as a reference only.*

*** Attenuation is in db/100 ft @ 2.4GHz*

¹ Velocity of Propagation is the speed at which an electrical signal passes through a cable.