

T TIMES
MICROWAVE SYSTEMS
AN AMPHENOL COMPANY

LMR[®]
CABLES • CONNECTORS • TOOLS • ASSEMBLIES



GUIDE

Coaxial Cables, Tools,
and Connectors

EUROPEAN VERSION

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LMR® and LLPX® are registered trademarks of Times Microwave Systems.

The LMR® cable solution offers a complete line of highly flexible, rugged, low-loss braided cables with the fastest, easiest connector installation available. LMR cables provide superior performance compared to RG cables of similar size. They also provide significantly better attenuation, shielding effectiveness, and UV resistance.

LMR® system is a complete solution with ultimate simplicity. Its ruggedness, weatherability, and proven construction provide the reliable and durable solutions end users require that will stand the test of time.

LMR® is not just a family of cables – LMR products include an extensive variety of connectors– including X-series EZ design connectors featuring common interface types and non-solder center pins. These connectors can be easily terminated using Times Microwave Systems' prep tools included within the LMR system.

Product line includes:

- An array of industry standard options for cable types, jackets, and cable sizes
- A complete line of cable, connectors (including EZ), tools, and accessories
- Full range of cables sizes, from LMR-100 (0.110") all the way up to LMR-1200- DB (1.200")
- A complete line of cable prep and connector installation tools –everything needed to get from the antenna to the equipment– so users always have the right tools
- Supported by Times Microwave Systems extensive distribution network and unsurpassed technical support

Visit Us at www.timesmicrowave.com to learn more about how the LMR system can power your critical communications infrastructure.

| Cable Family | Description | Center Conductor | Dielectric | Outer Conductor | Connectors | Installation |
|------------------|--------------------------------------|------------------|------------|-----------------|---------------------------|----------------|
| Standard | General use 50 Ohm coaxial cable | Solid | Foam PE | Tape & copper | Crimp (EZ) or Solder (TC) | Indoor/Outdoor |
| UltraFlex | Flexible construction | Stranded | Foam PE | Tape & copper | Solder (TC) | Indoor/Outdoor |
| LLPX | Plenum rated for indoor applications | Solid | ePTFE | Tape & copper | Crimp (EZ) or Solder (TC) | Indoor |
| 75 Ohm | General use 75 Ohm coaxial cable | Solid | Foam PE | Tape & copper | Crimp (EZ) or Solder (TC) | Indoor/Outdoor |

LMR® Standard

High-performance broadband, flexible, low-loss 50 Ohm coaxial cables. Features include 100% effective shielding, available as pre-terminated assemblies, and rugged resistance to UV, sunlight, and weather.

Ideal for...

- Jumper Assemblies in Wireless Systems
- Short Antenna Feeder runs
- Applications requiring an easily routed, low loss RF cable

LMR® LLPX®

Indoor highly fire-retardant cable designed for runs within return air handling plenums (e.g. dropped ceilings, raised floors).

Ideal for...

- Indoor Plenum Feeder runs
- UL/NEC/CSA listed CMP/FT6
- Any wireless application

Applications:

STANDARD

The industry standard in high-performance broadband, flexible, low-loss 50 Ohm coaxial cables. Features include 100% effective shielding, availability as pre-terminated assemblies, and rugged resistance to UV, sunlight, and weather.

FIRE RETARDANT

LMR-FR is a non-halogen (non-toxic), low smoke, fire retardant cable designed for in-building runs that can be routed anywhere except air handling plenums. LMR-FR is UL/NEC & CSA listed 'CMR' and 'FT4' respectively, meets FAA FAR25 requirements and is MSHA-P listed for mining applications.

DIRECT BURIAL

LMR-DB is a waterproof version of the LMR. The addition of a waterproofing compound in and around the foil/braid ensures continuous reliable service should the jacket be inadvertently damaged during installation or in the future.

LMR® UltraFlex

A stranded center conductor and rubber outer jacketed cable designed for multiple bending/flexing cycles. It is used for both indoor and outdoor applications.

Ideal for...

- Communications Systems
- Short Antenna Feeder runs
- Any application that requires additional flexibility

LMR® 75 Ohm

UV Resistant Polyethylene jacketed cable designed for 30-year service outdoor use. The bending and handling characteristics are significantly better than other smooth wall or corrugated hard-line cables.

Ideal for...

- Satellite Applications
- Video Applications-CCTV, CATV, base/broadband
- In-Building Feeder Runs
- Any 75 Ohm Wireless Application

Connectors

LMR® connectors include a wide variety of interface types. Advantage™ -X series feature of solderless contact and a 'no braid trim' design, improving assembly, reducing FOD, and making them the preferred choice for quick and reliable field installations. Most interfaces are also available in a solder-pin TC version.



All Advantage™ EZ-X series connectors have the following benefits:

- No braid trimming required
- Corrosion resistant
- Center pin contacts made from silver or gold plated beryllium copper
- Spring finger inner contacts
- Crimp style outer contacts
- Optimized connector retention



EZ connectors are the preferred choice for quick and reliable field installations.

Times Microwave Systems offers a complete line of site installation hardware and accessories- everything you need to get from the antenna to the equipment:

Ground kits: Perfectly sized to each LMR cable, with never a chance of the ground strap being too tight (crushed cable), or too loose (poor grounding)

Hangers: Snap-in, butterfly

Hoisting grips: Stainless steel cable pull hoisting grips

Weatherproofing kits: Tape and cold shrink

Tools

Identifying the proper tools for a job, making sure that you have all of the necessary tools and storing them in a way that is quickly accessible when working remote on a job site, has been a timeless struggle.

The Times Microwave Systems hard case tool kits include hard foam cut-outs that will keep all of the tools required for a specific job all in one place. All it takes is a quick flip of the lid to make sure you have everything you need.

TK-195/200/240EZ-HC

- For LMR-195, 200 and 240 • X series connectors
- **CT-240/200/195/100**
Crimp tool for LMR 100/195/200/240 connectors
- **CST-240A**
Prep tool for LMR-240
- **CST-195/200**
Prep tool for LMR-195/200 connectors
- **CCT-03**
Cable cutting tool for LMR-100 through LMR-400



660-1206



TK-400/400-75EZ-HC

- For LMR-400 and 400-75 • X series connectors
- **CT-400/300**
Crimp Tool for LMR 400 and LMR 300
- **CST-400-75**
Prep tool for LMR 400-75
- **CST-400**
Prep tool for LMR 400
- **CCT-03**
Cable cutting tool for LMR-100 through LMR-400



660-1266



TK-CST-HC (Prep Tool Kit)

- For LMR, LMR-DB, and LMR-FR
- **CST-195/200**
Prep tool for LMR 195/200
- **CST-240A**
Prep tool for LMR 240
- **CST-400**
Prep tool for LMR 400
- **CST-600**
Prep tool for LMR 600
- **CST-240-PX**
Prep tool for LMR 240-LLPX
- **CST-400-PX**
Prep tool for LMR 400-LLPX
- **CST-600-PX**
Prep tool for LMR 600-LLPX



660-1268



Attenuation (dB per 100 feet; +25C)

| Size | 7/8"LDF | LMR 1200 | LMR 900 | 1/2"LDF | LMR 600 | 1/2"SuperFlex | 3/8" LDF |
|------|----------|----------|---------|---------|----------|---------------|----------|
| | 27.69 mm | 30.48 mm | 22.1 mm | 16 mm | 14.99 mm | 13.21 mm | 11.18 mm |

Frequency (MHz)

| | | | | | | | |
|------|-------|------|-------|--------|-------|--------|--------|
| 30 | 0.65 | 0.69 | 0.94 | 1.21 | 1.38 | 1.84 | 1.86 |
| 50 | 0.84 | 0.89 | 1.23 | 1.57 | 1.79 | 2.40 | 2.41 |
| 150 | 1.50 | 1.58 | 2.16 | 2.77 | 3.16 | 4.23 | 4.27 |
| 220 | 1.84* | 1.93 | 2.63 | 3.45* | 3.87 | 5.18* | 5.22* |
| 450 | 2.74 | 2.83 | 3.84 | 4.95 | 5.64 | 7.61 | 7.55 |
| 900 | 4.04* | 4.17 | 5.58 | 7.25* | 8.20 | 11.19* | 11.02* |
| 1500 | 5.45 | 5.54 | 7.35 | 9.61 | 10.86 | 14.99 | 14.53 |
| 2000 | 6.46 | 6.53 | 8.63 | 11.32 | 12.80 | 17.75 | 17.09 |
| 2500 | 7.45* | 7.42 | 9.78 | 12.83* | 14.50 | 22.02* | 19.39* |
| 5800 | N/A | N/A | 16.08 | 19.69 | 23.95 | 33.79 | 31.83 |
| 8000 | N/A | N/A | N/A | N/A | N/A | 41.34 | 38.26 |

Power Handling (kW; +40C; Sea Level)

| Size | 7/8"LDF | LMR 1200 | LMR 900 | 1/2"LDF | LMR 600 | 1/2"SuperFlex | 3/8" LDF |
|------|----------|----------|---------|---------|----------|---------------|----------|
| | 27.69 mm | 30.48 mm | 22.1 mm | 16 mm | 14.99 mm | 13.21 mm | 11.18 mm |

Frequency (MHz)

| | | | | | | | |
|------|-------|------|------|--------|------|--------|--------|
| 30 | 14.0 | 12.6 | 8.9 | 6.31 | 5.5 | 5.75 | 4.14 |
| 50 | 10.7 | 9.7 | 6.8 | 4.85 | 4.3 | 4.42 | 3.19 |
| 150 | 6.04 | 5.5 | 3.9 | 2.75 | 2.4 | 2.49 | 1.81 |
| 220 | 4.94* | 4.5 | 3.2 | 2.23* | 1.9 | 2.04* | 1.49* |
| 450 | 3.32 | 3.1 | 2.2 | 1.53 | 1.3 | 1.38 | 1.02 |
| 900 | 2.24 | 2.1 | 1.5 | 1.05* | 0.93 | 0.944* | 0.703* |
| 1500 | 1.66 | 1.6 | 1.1 | 0.793 | 0.70 | 0.705 | 0.530 |
| 2000 | 1.40 | 1.3 | 1.0 | 0.673 | 0.59 | 0.597 | 0.451 |
| 2500 | 1.21* | 1.2 | 0.9 | 0.594* | 0.52 | 0.547* | 0.398* |
| 5800 | N/A | N/A | 0.52 | 0.38 | 0.32 | 0.31 | 0.18 |
| 8000 | N/A | N/A | N/A | 0.32 | 0.26 | 0.26 | 0.2 |

| LMR 400 | 3/8"SuperFlex | RG213/214 | 1/4"SuperFlex | LMR 240 | RG8X | LMR 195 | RG-58 |
|----------|---------------|-----------|---------------|---------|---------|---------|---------|
| 10.29 mm | 10.54 mm | 10.29 mm | 7.62 mm | 6.1 mm | 6.15 mm | 4.95 mm | 4.95 mm |

| | | | | | | | |
|-------|--------|-------|--------|-------|-------|--------|-------|
| 2.30 | 2.15 | 3.94 | 3.22 | 4.27 | 6.56 | 6.56 | 8.20 |
| 2.95 | 2.78 | 5.25 | 4.17 | 5.58 | 8.20 | 8.53 | 10.17 |
| 4.92 | 4.89 | 9.19 | 7.32 | 9.84 | 15.42 | 14.44 | 20.34 |
| 5.91 | 5.97* | 11.48 | 8.92 | 12.14 | 19.69 | 17.72 | 24.28 |
| 8.86 | 8.73 | 17.06 | 12.89 | 17.39 | 28.22 | 25.59 | 34.78 |
| 12.80 | 12.66* | 26.25 | 18.6* | 24.94 | 42.00 | 36.42 | 54.14 |
| 16.73 | 16.80 | N/A | 24.51 | 32.48 | N/A | 47.57 | N/A |
| 19.69 | 19.72 | N/A | 28.64 | 37.73 | N/A | 55.45 | N/A |
| 22.31 | 22.44* | N/A | 32.32* | 42.32 | N/A | 62.34 | N/A |
| 35.43 | 36.42 | N/A | 51.84 | 66.93 | N/A | 98.10 | N/A |
| 42.65 | 44.29 | N/A | 62.34 | 79.73 | N/A | 117.13 | N/A |

Competitor's Data As Published

* = Estimated from published data

*Trademarks are exclusive property of their respective owners

| LMR 400 | 3/8"SuperFlex | RG213/214 | 1/4"SuperFlex | LMR 240 | RG8X | LMR 195 | RG-58 |
|----------|---------------|-----------|---------------|---------|---------|---------|---------|
| 10.29 mm | 10.54 mm | 10.29 mm | 7.62 mm | 6.1 mm | 6.15 mm | 4.95 mm | 4.95 mm |

| | | | | | | | |
|------|--------|------|--------|------|------|------|------|
| 3.3 | 3.97 | 1.8 | 2.28 | 1.49 | 0.35 | 0.89 | 0.40 |
| 2.6 | 3.06 | 1.2 | 1.76 | 1.15 | 0.28 | 0.68 | 0.30 |
| 1.5 | 1.74 | 0.62 | 1.00 | 0.66 | 0.15 | 0.39 | 0.16 |
| 1.2 | 1.44* | N/A | 0.825* | 0.54 | N/A | 0.32 | N/A |
| 0.83 | 0.975 | 0.30 | 0.567 | 0.38 | 0.08 | 0.22 | 0.08 |
| 0.58 | 0.674* | 0.18 | 0.393* | 0.26 | 0.05 | 0.15 | 0.05 |
| 0.44 | 0.507 | N/A | 0.299 | 0.20 | N/A | 0.12 | N/A |
| 0.37 | 0.431 | N/A | 0.256 | 0.17 | N/A | 0.10 | N/A |
| 0.33 | 0.379* | N/A | 0.255* | 0.15 | N/A | 0.09 | N/A |
| 0.21 | 0.23 | N/A | 0.14 | 0.1 | N/A | 0.06 | N/A |
| 0.17 | 0.19 | N/A | 0.12 | 0.08 | N/A | 0.04 | N/A |

Competitor's Data As Published

* = Estimated from published data

*Trademarks are exclusive property of their respective owners

Specifications

Ω Impedance 50 Ohms

Op Temp -40 to +185°F
-40 to +85°C

Units

| | | |
|---------------------------|-------------------|--------------|
| Diameter | in (mm) | 0.195 (4.95) |
| Weight | lb/ft (kg/m) | 0.021 (0.03) |
| Bend Radius: Installation | in (mm) | 0.5 (12.7) |
| Bend Radius: Repeated | in (mm) | 2.0 (50.8) |
| Bending Moment | ft-lb (N-m) | 0.2 (0.27) |
| Tensile Strength | lb (kg) | 40 (18.2) |
| Flat Plate Crush | lb/in. (kg/mm) | 15 (0.27) |
| Maximum Frequency | GHz | 8 |
| Velocity of Propagation | % | 80 |
| Dielectric Constant | NA | 1.56 |
| Time Delay | nS/f (nS/m) | 1.27 (4.38) |
| Capacitance | pF/ft (pF/m) | 25.4 (89.12) |
| Inductance | uH/ft (uH/m) | 0.064 (0.21) |
| Shielding Effectiveness | dB | >90 |
| Inner Conductor | Ohms/1000ft (/km) | 7.6 (24.9) |
| Outer Conductor | Ohms/1000ft (/km) | 4.9 (16.1) |
| Voltage Withstand | Volts DC | 1000 |
| Jacket Spark | Volts RMS | 3000 |
| Peak Power | kW | 2.5 |



Calculation

$$IL = (K1 \times v(f) + K2 \times f) \times \text{Cable Length}$$

Cable Insertion Loss
f = Frequency (MHz)

Use K values with
matching length unit

| K values | dB/100ft | dB/100m |
|----------|------------|-------------|
| K1 | 0.36042759 | 1.182562923 |
| K2 | 0.0004747 | 0.001557491 |

INNER CONDUCTOR

Solid BC 0.037 in (0.94 mm)

OUTER CONDUCTOR

Aluminum Tape 0.116 in (2.95 mm)

JACKET

(Part Description table) 0.195 in (4.95 mm)

DIELECTRIC

Foam PE 0.110 in (2.79 mm)

OVERALL BRAID

Tinned Copper 0.139 in (3.53 mm)

Connectors

| Gender | Description | Coupling Nut | Part Number | Stock Code | Connector Code |
|--------|------------------|--------------|------------------------------|------------|----------------|
| Male | Straight Plug | Hex | EZ-195-200-4310M-X | 3190-8092 | 43M |
| Male | Right Angle | Hex | EZ-195-200-4310M-RA-X | 3190-8093 | 43MR |
| Male | Straight Plug | Hex/Knurl | EZ-195-200-716M-X | 3190-8102 | DM |
| | Right Angle | Hex/Knurl | EZ-195-200-716M-RA-X | 3190-8103 | DMR |
| Male | Straight Plug | Knurl | EZ-195-BM-X | 3190-6141 | BM |
| Female | Straight Jack | Hex | TC-195-FMEF-X | 3190-6249 | FMEF |
| | Bulkhead | N/A | EZ-195-NF-BH-X | 3190-6401 | NFB |
| Female | Straight Jack | N/A | EZ-195-200-NF-X | 3190-8091 | NF |
| | Straight Plug | Hex/Knurl | EZ-195-NMH-X | 3190-6497 | NM |
| | Right Angle | Hex/Knurl | TC-195-NMH-RA-D | 3190-6543 | NM |
| Female | Straight Jack | N/A | EZ-195-QF-X | 3190-6384 | QF |
| | Straight Plug | Knurl | EZ-195-QM-X | 3190-6383 | QM |
| Female | Straight Jack | N/A | EZ-195-200-QNF-X | 3190-8040 | QNF |
| | Straight Plug | N/A | EZ-195-200-QNM-X | 3190-8038 | QNM |
| Female | Right Angle Plug | N/A | EZ-195-200-QNM-RA-X | 3190-8039 | QNMR |
| | Straight Jack | N/A | EZ-195-200-SF-X | 3190-8002 | SF |
| | Straight Plug | Hex | EZ-195-SM-X | 3190-6140 | SM |
| Male | Straight Plug | Hex | TC-195-SM-SS-X | 3190-2878 | SM |
| | Right Angle Plug | Hex | EZ-195-SM-RA-X | 3190-6431 | SMR |
| Female | Straight Jack | N/A | EZ-195-200-TF-BH-X | 3190-8004 | TFB |
| | Straight Jack | N/A | EZ-195-TF-RP-X | 3190-6166 | TFRP |
| | Straight Plug | Hex/Knurl | EZ-195-TM-X | 3190-6496 | TM |
| | Straight Plug | Hex/Knurl | EZ-195-TM-RP-X | 3190-6142 | TMRP |
| | Right Plug | Hex | TC-195-TM-X | 3190-6568 | TM |
| Male | Right Plug | Hex | EZ-195-200-TM-RA-X | 3190-8003 | TMR |
| | Straight Plug | Knurl | EZ-195-200-UM-X | 3190-8005 | UM |
| Male | Right Angle Plug | Knurl | EZ-195-200-UM-RA-X | 3190-8006 | UMR |

*Connector part numbers in bold text are the default connectors for LMR-195 cable assemblies

Part Description

| Part-Number | Application | Jacket | Color | Stock Code | Cable Code |
|----------------|--------------------------|--------|-------|------------|------------|
| LMR-195 | Outdoor | PE | Black | 54110 | LMR195 |
| LMR-195-DB | Outdoor/Watertight | PE | Black | 54113 | LDB195 |
| LMR-195-FR | Indoor/Outdoor Riser CMR | FRPE | Black | 54111 | LFR195 |
| LMR-195-FR-PVC | Indoor/Outdoor Riser CMR | FRPVC | Black | 54158 | LPF195 |
| LMR-195-MA | Mobile Antennas | PVC | Black | 54210 | LMA195 |
| LMR-195-PVC | General Purpose | PVC | Black | 54215 | LPV195 |

* LMR-FR is a low-smoke, zero-halogen cable. See page 54 for performance details

Assembly Ordering Guide

XXXXXX

Cable Code

-XXX

Connector A

XXX-

Connector B

XX.X

Length

X

Units of measure: I = Inches, F = Feet, M = Meters

*Refer to the Part Description table to select your desired Cable Code **Refer to the Connector table on page 9 to select your desired connector

Specifications

Ω Impedance 50 Ohms

Op Temp -40 to +185°F
-40 to +85°C

Units

| | | |
|---------------------------|-------------------|--------------|
| Diameter | in (mm) | 0.240 (6.10) |
| Weight | lb/ft (kg/m) | 0.034 (0.05) |
| Bend Radius: Installation | in (mm) | 0.75 (19.1) |
| Bend Radius: Repeated | in (mm) | 2.5 (63.5) |
| Bending Moment | ft-lb (N-m) | 0.25 (0.34) |
| Tensile Strength | lb (kg) | 80 (36.3) |
| Flat Plate Crush | lb/in. (kg/mm) | 20 (0.36) |
| Maximum Frequency | GHz | 8 |
| Velocity of Propagation | % | 83 |
| Dielectric Constant | NA | 1.42 |
| Time Delay | nS/f (nS/m) | 1.21 (3.97) |
| Capacitance | pF/ft (pF/m) | 24.5 (80.6) |
| Inductance | uH/ft (uH/m) | 0.060 (0.20) |
| Shielding Effectiveness | dB | >90 |
| Inner Conductor | Ohms/1000ft (/km) | 3.2 (10.5) |
| Outer Conductor | Ohms/1000ft (/km) | 3.89 (12.8) |
| Voltage Withstand | Volts DC | 1500 |
| Jacket Spark | Volts RMS | 5000 |
| Peak Power | kW | 5.6 |



Calculation

$$IL = (K1 \times v(f) + K2 \times f) \times \text{Cable Length}$$

Cable Insertion Loss
f = Frequency (MHz)

Use K values with
matching length unit

| K values | dB/100ft | dB/100m |
|----------|----------|------------|
| K1 | 0.2445 | 0.8022045 |
| K2 | 0.00033 | 0.00108273 |

INNER CONDUCTOR

Solid BC 0.056 in (1.42 mm)

OUTER CONDUCTOR

Aluminum Tape 0.155 in (3.94 mm)

JACKET

(Part Description table) 0.240 in (6.10 mm)

DIELECTRIC

Foam PE 0.150 in (3.81 mm)

OVERALL BRAID

Tinned Copper 0.178 in (4.52 mm)

Part Description

| Part-Number | Application | Jacket | Color | Stock Code | Cable Code |
|----------------|--------------------------|--------|-------|------------|------------|
| LMR-240 | Outdoor | PE | Black | 54021 | LMR240 |
| LMR-240-DB | Outdoor/Watertight | PE | Black | 54090 | LDB240 |
| LMR-240-FR | Indoor/Outdoor Riser CMR | FRPE | Black | 54029 | LF240 |
| LMR-240-FR-PVC | Indoor/Outdoor Riser CMR | FRPVC | Black | 54214 | LPF240 |
| LMR-240-PVC | General Purpose | PVC | Black | 54140 | LPV240 |
| LMR-240-MA | Indoor & Mobile Antenna | PVC | Black | 54046 | LMA240 |

* LMR-FR is a low-smoke, zero-halogen cable. See page 54 for performance details

Assembly Ordering Guide

XXXXXX

Cable Code

-XXX

Connector A

XXX-

Connector B

XX.X

Length

X

Units of measure: I = Inches, F = Feet, M = Meters

*Refer to the Part Description table to select your desired Cable Code **Refer to the Connector table on page 11 to select your desired connector

Connectors

| Gender | Description | Coupling Nut | Part Number | Stock Code | Connector Code | |
|----------|-------------|------------------|-------------|--------------------------|----------------|-------|
| 1.0/2.3 | Male | Straight Plug | Knurl | EZ-240-1023M-X | 3190-6283 | 1023M |
| 4.3/10 | Male | Straight Plug | Hex | EZ-240-4310M-X | 3190-6386 | 43M |
| | | Right Angle Plug | Hex | TC-240-4310M-X | 3190-6385 | 43M |
| 7/16 DIN | Male | Straight Plug | Hex | EZ-240-4310M-RA-X | 3190-8094 | 43MR |
| | | Right Angle Plug | Hex | TC-240-716M | 3190-2982 | DM |
| BNC | Male | Straight Plug | Hex | TC-240-716M-RA-D | 3190-2983 | DMR |
| | | Right Angle Plug | Hex/Knurl | EZ-240-716M-RA-X | 3190-8104 | DMR |
| BNC | Male | Straight Plug | Knurl | EZ-240-BM-X | 3190-6406 | BM |
| | | Right Angle Plug | Knurl | TC-240-BM-X | 3190-6380 | BM |
| F | Male | Straight Plug | Hex | EZ-240-BM-RA-X | 3190-2868 | BMR |
| FME | Male | Straight Plug | Hex | TC-240-BM-RA-D | 3190-6552 | BMR |
| Mini UHF | Male | Straight Plug | Knurl | TC-240-FM-X | 3190-6773 | FM |
| N | Female | Straight Jack | N/A | TC-240-FMEM-X | 3190-6251 | FMEM |
| | | | N/A | TC-240-MUHF | 3190-445 | MUF |
| | | | N/A | EZ-240-NF-X | 3190-2795 | NF |
| N | Male | Straight Plug | N/A | EZ-240-NF-BH-X | 3190-6316 | NFB |
| | | | N/A | TC-240-NF-BH-X | 3190-6545 | NFB |
| | | | N/A | TC-240-NF-PM-X | 3190-2889 | NF |
| QMA | Male | Straight Plug | Hex/Knurl | EZ-240-NMH-X | 3190-6382 | NM |
| | | | Hex/Knurl | TC-240-NMH-X | 3190-6381 | NM |
| | | | Hex/Knurl | EZ-240-NMH-RA-X | 3190-6143 | NMR |
| QMA | Female | Straight Jack | Hex/Knurl | TC-240-NMH-RA-D | 3190-6549 | NMR |
| | | | Knurl | EZ-240-QM-X | 3190-6564 | QM |
| | | | Knurl | TC-240-QM-RA-X | 3190-2895 | QMR |
| QN | Male | Right Angle Plug | N/A | EZ-240-QNF-X | 3190-8042 | QNF |
| | | | N/A | TC-240-QNF-X | 3190-8047 | QNM |
| SMA | Female | Straight Jack | N/A | EZ-240-QNM-RA-X | 3190-8041 | QNMR |
| | | | N/A | EZ-240-SF-X | 3190-8008 | SF |
| | | | N/A | TC-240-SF-BH-SS-X | 3190-2896 | SF |
| SMA | Male | Straight Plug | Hex | EZ-240-SM-X | 3190-6319 | SM |
| | | | Hex | TC-240-SM-SS-X | 3190-2898 | SM |
| | | | Hex | TC-240-SM-RP | 3190-326 | SMRP |
| TNC | Female | Straight Jack | Hex | EZ-240-SM-RA-X | 3190-6551 | SMR |
| | | | Hex | TC-240-SM-RA-SS-D | 3190-6546 | SMR |
| | | | N/A | EZ-240-TF-X | 3190-6204 | TF |
| UHF | Male | Straight Plug | N/A | EZ-240-TF-BH-X | 3190-8009 | TFB |
| | | | N/A | EZ-240-TF-RP-X | 3190-6405 | TFRP |
| | | | N/A | TC-240-TM-RP-X | 3190-2892 | TMRP |
| UHF | Male | Right Angle Plug | Hex/Knurl | EZ-240-TM-X | 3190-6494 | TM |
| | | | Hex/Knurl | TC-240-TM-X | 3190-6550 | TM |
| | | | Hex/Knurl | EZ-240-TM-RA-X | 3190-2726 | TMR |
| UHF | Male | Right Angle Plug | Hex/Knurl | TC-240-TM-RA-D | 3190-6547 | TMR |
| | | | Knurl | EZ-240-UM-X | 3190-8010 | UM |
| UHF | Male | Right Angle Plug | Knurl | EZ-240-UM-RA-X | 3190-8011 | UMR |

*Connector part numbers in bold text are the default connectors for LMR-240 cable assemblies

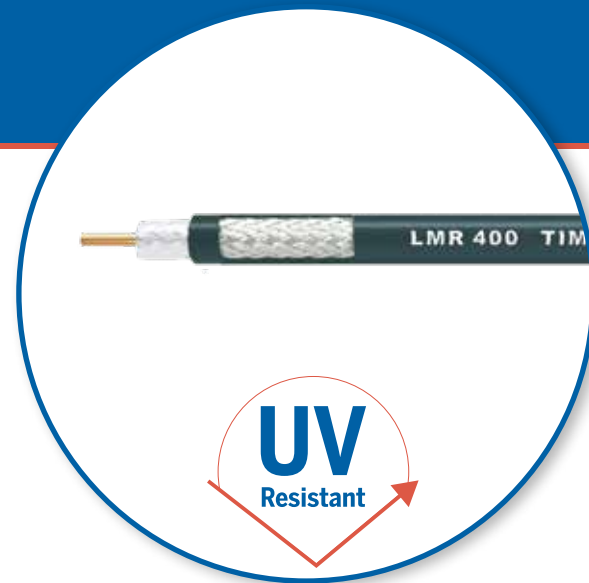
Specifications

Impedance 50 Ohms

Op Temp -40 to +185°F
-40 to +85°C

Units

| | | |
|---------------------------|-------------------|---------------|
| Diameter | in (mm) | 0.405 (10.29) |
| Weight | lb/ft (kg/m) | 0.068 (0.10) |
| Bend Radius: Installation | in (mm) | 1.0 (25.4) |
| Bend Radius: Repeated | in (mm) | 4.0 (101.6) |
| Bending Moment | ft-lb (N-m) | 0.5 (0.68) |
| Tensile Strength | lb (kg) | 160 (72.6) |
| Flat Plate Crush | lb/in. (kg/mm) | 40 (0.71) |
| Maximum Frequency | GHz | 8 |
| Velocity of Propagation | % | 84 |
| Dielectric Constant | NA | 1.38 |
| Time Delay | nS/f (nS/m) | 1.20 (3.92) |
| Capacitance | pF/ft (pF/m) | 23.9 (78.4) |
| Inductance | uH/ft (uH/m) | 0.060 (0.20) |
| Shielding Effectiveness | dB | >90 |
| Inner Conductor | Ohms/1000ft (/km) | 1.39 (4.6) |
| Outer Conductor | Ohms/1000ft (/km) | 1.65 (5.4) |
| Voltage Withstand | Volts DC | 2500 |
| Jacket Spark | Volts RMS | 8000 |
| Peak Power | kW | 16 |



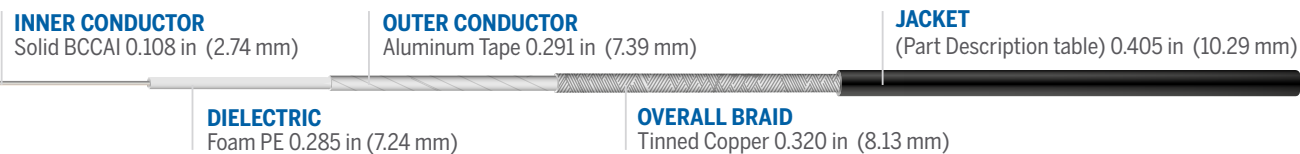
Calculation

$$IL = (K1 \times V(f) + K2 \times f) \times \text{Cable Length}$$

Cable Insertion Loss
f = Frequency (MHz)

Use K values with
matching length unit

| K values | dB/100ft | dB/100m |
|----------|-----------|-------------|
| K1 | 0.1235129 | 0.405245825 |
| K2 | 0.0002626 | 0.000861591 |



Part Description

| Part-Number | Application | Jacket | Color | Stock Code | Cable Code |
|----------------|--------------------------|--------|-------|------------|------------|
| LMR-400 | Outdoor | PE | Black | 54001 | LMR400 |
| LMR-400-DB | Outdoor/Watertight | PE | Black | 54091 | LDB400 |
| LMR-400-FR | Indoor/Outdoor Riser CMR | FRPE | Black | 54030 | LFR400 |
| LMR-400-FR-PVC | Indoor/Outdoor Riser CMR | FRPVC | Black | 54073 | LPF400 |
| LMR-400-PVC | General Purpose | PVC | Black | 54218 | LPV400 |
| LMR-400-RR-DB | RodentRepel/Watertight | PE | Black | 54421 | LRR400 |

* LMR-FR is a low-smoke, zero-halogen cable. See page 54 for performance details

Assembly Ordering Guide



*Refer to the Part Description table to select your desired Cable Code **Refer to the Connector table on page 13 to select your desired connector

Connectors

| Gender | Description | Coupling Nut | Part Number | Stock Code | Connector Code | | |
|----------|-------------|------------------|------------------|---|------------------------------------|------------------------|-------------|
| 4.3/10 | Male | Straight plug | Hex | EZ-400-4310M-X TC-400-4310M-X | 3190-8096 3190-6272 | 43M 43M | |
| | | Right angle plug | Hex | EZ-400-4310M-RA-X | 3190-8097 | 43MR | |
| 7/16 DIN | Male | Straight plug | Hex | EZ-400-716M-X TC-400-716M-X | 3190-2524 3190-2597 | DM DM | |
| | | Right angle plug | Hex | EZ-400-716M-RA-X TC-400-716M-RA-D | 3190-2545 3190-2598 | DMR DMR | |
| BNC | Male | Straight plug | Knurl | EZ-400-BM-X TC-400-BM-X | 3190-2852 3190-6232 | BM BM | |
| | | Right angle plug | Knurl | EZ-400-BM-RA-X TC-400-BM-RA-D | 3190-2847 3190-6430 | BMR BMR | |
| HN | Male | Straight plug | Knurl | TC-400-HNM | 3190-923 | HNM | |
| | | Right angle plug | Hex/Knurl | TC-400-HNM-RA | 3190-2541 | HNMR | |
| Mini UHF | | Straight plug | Knurl | TC-400-MUHF | 3190-520 | MUM | |
| N | Female | Straight jack | N/A | EZ-400-NF-BH-X | 3190-6328 | NFB | |
| | | | | EZ-400-NF-X TC-400-NF-X | 3190-2818 3190-2815 | NF NMK | |
| | Male | Straight plug | Hex/Knurl | EZ-400-NMH-X | 3190-2590 | NM | |
| | | | | EZ-400-NMC-2-D TC-400-NMH-X | 3190-2640 3190-2626 | NMC NM | |
| | | | | EZ-400-NMK-X TC-400-NMC-2 TC-400-NM-RP | 3190-6071 3190-6077 3190-960 | NMK NMC NMRP | |
| | | Right angle plug | Hex/Knurl | EZ-400-NMH-RA-X TC-400-NMH-RA-D | 3190-6342 3190-2293 | NMR NMR | |
| | | | | EZ-400-QNF-X | 3190-2980 | QNM | |
| | | QN | Female | Straight jack | N/A | EZ-400-QNF-X | 3190-2980 |
| | Male | | Straight plug | N/A | EZ-400-QNM-X | 3190-8043 | QMM |
| | | | Right angle plug | Knurl | TC-400-QNM-X EZ-400-QNM-RA-X | 3190-6212 3190-2981 | QNM QNMR |
| SMA | Female | Straight jack | N/A | EZ-400-SF-X TC-400-SF-X | 3190-8023 3190-6174 | SF SF | |
| | Male | Straight plug | Hex | EZ-400-SM-X | 3190-8021 | SM | |
| | | Right angle plug | Solder Hex | TC-400-SM-X EZ-400-SM-RA-X | 3190-3046 3190-8022 | SM SMR | |
| TNC | Female | Straight jack | N/A | EZ-400-TF-X | 3190-3049 | TF | |
| | | | | EZ-400-TF-BH-X | 3190-8024 | TFB | |
| | | | | EZ-400-TF-RP TC-400-TF-X | 3190-795 3190-3051 | TFRP TF | |
| | | | | TC-400-TF-RP | 3190-1063 | TFRP | |
| | | | | TC-400-TF-RP | 3190-1063 | TFRP | |
| | Male | Straight plug | Knurl | EZ-400-TM-X TC-400-TM-X | 3190-2533 3190-2532 | TM TM | |
| | | | | EZ-400-TM-RP TC-400-TM-RP | 3190-794 3190-1062 | TMRP TMRP | |
| | | | | EZ-400-TM-RA-X TC-400-TM-RP-RA-D | 3190-2800 3190-6147 | TMR TMRRP | |
| | | Right angle plug | Hex/Knurl | TC-400-TM-RA-D | 3190-2671 | TMR | |
| | | | | | | | |
| UHF | Male | Straight plug | Knurl | EZ-400-UM-X | 3190-8025 | UM | |
| | | Right angle plug | Knurl | EZ-400-UM-RA-X | 3190-8026 | UMR | |

*Connector part numbers in bold text are the default connectors for LMR-400 cable assemblies

Specifications

Ω Impedance 50 Ohms

Op Temp -40 to +185°F
-40 to +85°C

Units

| | | |
|---------------------------|-------------------|---------------|
| Diameter | in (mm) | 0.590 (14.99) |
| Weight | lb/ft (kg/m) | 0.131 (0.20) |
| Bend Radius: Installation | in (mm) | 1.50 (38.1) |
| Bend Radius: Repeated | in (mm) | 6.0 (152.4) |
| Bending Moment | ft-lb (N-m) | 2.75 (3.73) |
| Tensile Strength | lb (kg) | 350 (158.9) |
| Flat Plate Crush | lb/in. (kg/mm) | 60 (1.07) |
| Maximum Frequency | GHz | 8 |
| Velocity of Propagation | % | 85 |
| Dielectric Constant | NA | 1.32 |
| Time Delay | nS/f (nS/m) | 1.17 (3.83) |
| Capacitance | pF/ft (pF/m) | 23.4 (76.6) |
| Inductance | uH/ft (uH/m) | 0.058 (0.19) |
| Shielding Effectiveness | dB | >90 |
| Inner Conductor | Ohms/1000ft (/km) | 0.53 (1.7) |
| Outer Conductor | Ohms/1000ft (/km) | 1.2 (3.9) |
| Voltage Withstand | Volts DC | 4000 |
| Jacket Spark | Volts RMS | 8000 |
| Peak Power | kW | 40 |



Calculation

$$IL = (K1 \times V(f) + K2 \times f) \times \text{Cable Length}$$

Cable Insertion Loss
f = Frequency (MHz)

Use K values with
matching length unit

| K values | dB/100ft | dB/100m |
|----------|-----------|-------------|
| K1 | 0.0763055 | 0.250358346 |
| K2 | 0.0002626 | 0.000861591 |



Part Description

| Part-Number | Application | Jacket | Color | Stock Code | Cable Code |
|----------------|--------------------------|--------|-------|------------|------------|
| LMR-600 | Outdoor | PE | Black | 54003 | LMR600 |
| LMR-600-DB | Outdoor/Watertight | PE | Black | 54093 | LDB600 |
| LMR-600-FR | Indoor/Outdoor Riser CMR | FRPE | Black | 54032 | LMR600 |
| LMR-600-FR-PVC | Indoor/Outdoor Riser CMR | FRPVC | Black | 54074 | LPF600 |
| LMR-600-PVC | General Purpose | PVC | Black | 54219 | LPV600 |
| LMR-600-RR-DB | RodentRepel/Watertight | PE | Black | 54478 | LRR600 |

* LMR-FR is a low-smoke, zero-halogen cable. See page 54 for performance details

Assembly Ordering Guide

XXXXXX Cable Code -XXX Connector A XXX- Connector B XX.X Length X Units of measure: I = Inches, F = Feet, M = Meters

*Refer to the Part Description table to select your desired Cable Code **Refer to the Connector table on page 15 to select your desired connector

Connectors

| Gender | Description | Coupling Nut | Part Number | Stock Code | Connector Code | |
|------------------------|---------------------|------------------|-----------------------|--------------------------|----------------|-------|
| BNC | Male | Right Angle Plug | Knurl | TC-600-BM-RA-D | 3190-2734 | BMR |
| DIN | 7-16 Female | Straight Jack | N/A | EZ-600-716F-X | 3190-2447 | DF |
| | | TC-600-716FC | 3190-375 | DF | | |
| | 7-16 Male | Straight Plug | Hex | EZ-600-716M-X | 3190-2643 | DM |
| TC-600-716M-X | | 3190-2642 | DM | | | |
| EIA FLANGE | 7/8 | Flange | N/A | EZ-600-716M-RA-X | 3190-6471 | DMR |
| | | | | TC-600-716M-RA-D | 3190-6211 | DMR |
| HN | Male | Straight Plug | Knurl | TC-600-HNMC | 3190-1429 | HNM |
| LC | Male | Straight Plug | Hex | TC-600-LCM | 3190-1406 | LCM |
| | | Straight | Hex | TC-600-4310M-X | 3190-6273 | 43M |
| 4.3/10 | 4.3/10 Male | Straight Plug | Hex | EZ-600-4310M-X | 3190-8100 | 43M |
| | | Right Angle Plug | Hex | EZ-600-4310M-RA-X | 3190-8101 | 43MR |
| N | Female | Straight Jack | N/A | EZ-600-NF-X | 3190-2817 | NF |
| | | | | EZ-600-NF-BH-X | 3190-8034 | NFB |
| | | | | TC-600-NF-X | 3190-2816 | NF |
| | Male | Straight Plug | Hex/Knurl | TC-600-NF-BH | 3190-589 | NFB |
| | | | | EZ-600-NMK | 3190-669 | NM |
| | | | | EZ-600-NMH-X | 3190-2627 | NM |
| | | Right Angle Plug | Hex/Knurl | EZ-600-NMC-2-D | 3190-2641 | NM |
| | | | | TC-600-NMC-2-D | 3190-6122 | NM |
| | | | | TC-600-NMH-X | 3190-2628 | NM |
| | | | | EZ-600-NMH-RA-X | 3190-6387 | NMR |
| TC-600-NMH-RA-D | 3190-2427 | NMR | | | | |
| QN | Female | Straight Jack | N/A | EZ-600-QNF-X | 3190-8050 | QNF |
| | Male | Straight Plug | N/A | EZ-600-QNM-X | 3190-8048 | QNM |
| SMA | Male | Right angle plug | N/A | EZ-600-QNM-RA-X | 3190-8049 | QNMNR |
| | | Straight Plug | Hex | EZ-600-SM-X | 3190-8111 | SM |
| TNC | Female | Straight Jack | N/A | TC-600-TF-RP | 3190-1065 | TFRP |
| | | | | EZ-600-TF-X | 3190-3050 | TF |
| | | | | EZ-600-TF-BH-X | 3190-8035 | TFB |
| | Male | Straight Plug | Knurl | EZ-600-TF-RP | 3190-797 | TFRP |
| | | | | TC-600-TF-X | 3190-3052 | TF |
| | | | | EZ-600-TM-RP | 3190-796 | TMRP |
| | | Right Angle Plug | Hex/Knurl | TC-600-TM-RP | 3190-1064 | TMRP |
| | | | | EZ-600-TM-X | 3190-2531 | TM |
| | | | | TC-600-TM-X | 3190-2530 | TM |
| | | | | TC-600-TM-RA-D | 3190-2707 | TMR |
| UHF | Male | Straight Plug | Knurl | EZ-600-UM-X | 3190-8036 | UM |
| | Straight Angle Plug | Knurl | EZ-600-UM-RA-X | 3190-8037 | UMR | |

*Connector part numbers in bold text are the default connectors for LMR-600 cable assemblies

Specifications

Ω Impedance
50 Ohms

Op Temp
-40 to +185°F
-40 to +85°C

Units

| | | |
|---------------------------|-------------------|--------------|
| Diameter | in (mm) | 0.870 (22.1) |
| Weight | lb/ft (kg/m) | 0.266 (0.40) |
| Bend Radius: Installation | in (mm) | 3.00 (76.2) |
| Bend Radius: Repeated | in (mm) | 9.0 (228.6) |
| Bending Moment | ft-lb (N-m) | 9.0 (12.20) |
| Tensile Strength | lb (kg) | 750 (340.5) |
| Flat Plate Crush | lb/in. (kg/mm) | 100 (1.79) |
| Maximum Frequency | GHz | 6 |
| Velocity of Propagation | % | 87 |
| Dielectric Constant | NA | 1.32 |
| Time Delay | nS/f (nS/m) | 1.17 (3.83) |
| Capacitance | pF/ft (pF/m) | 23.7 (77.8) |
| Inductance | uH/ft (uH/m) | 0.058 (0.19) |
| Shielding Effectiveness | dB | >90 |
| Inner Conductor | Ohms/1000ft (/km) | 0.54 (1.77) |
| Outer Conductor | Ohms/1000ft (/km) | 0.55 (1.8) |
| Voltage Withstand | Volts DC | 5000 |
| Jacket Spark | Volts RMS | 8000 |
| Peak Power | kW | 62 |



Calculation

$IL = (K1 \times v(f) + K2 \times f) \times \text{Cable Length}$

Cable Insertion Loss
f = Frequency (MHz)

Use K values with
matching length unit

| K values | dB/100ft | dB/100m |
|----------|----------|------------|
| K1 | 0.05177 | 0.16985737 |
| K2 | 0.00016 | 0.00059058 |



Part Description

| Part-Number | Application | Jacket | Color | Stock Code | Cable Code |
|---------------|--------------------------------|--------|-------|------------|------------|
| LMR-900-DB | Outdoor/Watertight | PE | Black | 54094 | LDB900 |
| LMR-900-FR | Indoor/Outdoor Riser CMR | FRPE | Black | 54033 | LF900 |
| LMR-900-RR-DB | RodentRepel/Outdoor/Watertight | PE | Black | 54422 | LRR900 |

* LMR-FR is a low-smoke, zero-halogen cable. See page 54 for performance details

Assembly Ordering Guide



*Refer to the Part Description table to select your desired Cable Code **Refer to the Connector table on page 17 to select your desired connector

Connectors

| Gender | Description | Coupling Nut | Part Number | Stock Code | Connector Code | |
|------------|-------------|---------------|-------------|----------------------|----------------|--------|
| DIN | 7-16 Female | Straight Jack | N/A | EZ-900-716FC-2-SP | 3190-6512 | DF |
| | 7-16 Male | Straight Plug | Hex | EZ-900-716MC-2-SP | 3190-6452 | DM |
| EIA FLANGE | 7/8 | Straight | N/A | EZ-900-78EIA-2-SP | 3190-6441 | 78EIA |
| | | Right Angle | N/A | EZ-900-78EIA-RA-2-SP | 3190-6442 | 78EIAR |
| N | Female | Straight Jack | N/A | EZ-900-NFC-2-SP | 3190-6444 | NF |
| | Male | Straight Plug | Hex/Knurl | EZ-900-NMC-2-SP | 3190-6443 | NM |

* Connector part numbers in bold text are the default connectors for LMR-900 cable assemblies

Specifications

Impedance 50 Ohms

Op Temp -40 to +185°F
-40 to +85°C

Units

| | | |
|---------------------------|-------------------|---------------|
| Diameter | in (mm) | 1.200 (30.48) |
| Weight | lb/ft (kg/m) | 0.448 (0.67) |
| Bend Radius: Installation | in (mm) | 6.50 (165.1) |
| Bend Radius: Repeated | in (mm) | 12.0 (304.8) |
| Bending Moment | ft-lb (N-m) | 15.0 (20.34) |
| Tensile Strength | lb (kg) | 1300 (590.2) |
| Flat Plate Crush | lb/in. (kg/mm) | 250 (4.47) |
| Maximum Frequency | GHz | 5.2 |
| Velocity of Propagation | % | 88 |
| Dielectric Constant | NA | 1.29 |
| Time Delay | nS/f (nS/m) | 1.15 (3.79) |
| Capacitance | pF/ft (pF/m) | 23.1 (75.8) |
| Inductance | uH/ft (uH/m) | 0.058 (0.19) |
| Shielding Effectiveness | dB | >90 |
| Inner Conductor | Ohms/1000ft (/km) | 0.32 (1.0) |
| Outer Conductor | Ohms/1000ft (/km) | 0.37 (1.2) |
| Voltage Withstand | Volts DC | 6000 |
| Jacket Spark | Volts RMS | 8000 |
| Peak Power | kW | 90 |



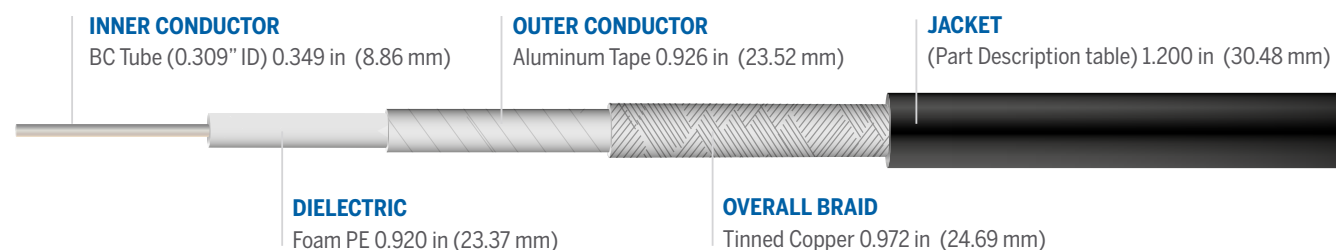
Calculation

$$IL = (K1 \times v(f) + K2 \times f) \times \text{Cable Length}$$

Cable Insertion Loss
f = Frequency (MHz)

Use K values with
matching length unit

| K values | dB/100ft | dB/100m |
|----------|----------|------------|
| K1 | 0.03737 | 0.12261097 |
| K2 | 0.00016 | 0.00052496 |



Part Description

| Part-Number | Application | Jacket | Color | Stock Code | Cable Code |
|-------------|--------------------------|--------|-------|------------|------------|
| LMR-1200-DB | Outdoor/Watertight | PE | Black | 54095 | LDB1200 |
| LMR-1200-FR | Indoor/Outdoor Riser CMR | FRPE | Black | 54034 | LFR1200 |

* LMR-FR is a low-smoke, zero-halogen cable. See page 54 for performance details

Assembly Ordering Guide

XXXXXXXXX - XXXX XXX - XX.X X

Cable Code Connector A Connector B Length Units of measure: I = Inches, F = Feet, M = Meters

*Refer to the Part Description table to select your desired Cable Code **Refer to the Connector table on page 19 to select your desired connector

Connectors

| Gender | Description | Coupling Nut | Part Number | Stock Code | Connector Code | |
|------------|-------------|---------------|-------------|--------------------|----------------|--------|
| DIN | 7-16 Female | Straight Jack | N/A | EZ-1200-716FC-2 | 3190-2784 | DF |
| | 7-16 Male | Straight Plug | Hex | EZ-1200-716MC-2 | 3190-2781 | DM |
| EIA FLANGE | 7/8 | Straight | N/A | EZ-1200-78EIA-2 | 3190-2780 | 78EIA |
| | | Right Angle | N/A | EZ-1200-78EIA-RA-2 | 3190-2782 | 78EIAR |
| N | Female | Straight Jack | N/A | EZ-1200-NFC-2 | 3190-2785 | NF |
| | Male | Straight Plug | Hex/Knurl | EZ-1200-NMC-2 | 3190-2783 | NM |

* Connector part numbers in bold text are the default connectors for LMR-1200 cable assemblies

195

| Installation Tools | Description | Part Number | Stock Code |
|------------------------|---|---------------------|------------|
| Combination Strip Tool | Prep Tool for LMR-195 and 200 | CST-195/200 | 3192-102 |
| Crimp Tool | Crimp tool for LMR-195,200 and 240 | CT-240/200/195/100 | 3192-256 |
| Universal Crimp Tool | Universal, heavy-duty crimp handle | CT-U | 3192-181 |
| Crimp Dies | LMR-195 crimp dies (0.213" hex) for use with the CT-U | Y197 | 3190-610 |
| Cutting Tool | Spring loaded LMR cutting tool | CCT-03 | 3192-267 |
| Debur Tool | Center conductor debur tool | DBT-U | 3192-001 |
| Replacement Blade Kit | Replacement blade for all CST prepping tools | RB-CST | 3192-086 |
| | Replacement blade for the CCT-03 cutting tool | RB-03 | 3192-337 |
| Tool Pouch | Embroided tool pouch with zipper | FKP-01 | 3190-584 |
| Hardcase Tool Kit | Connector Attachment Tools for LMR-195, 200 and 240 | TK-195/200/240EZ-HC | 660-1206 |
| Hardware | Description | Part Number | Stock Code |
| Weather Seal Boot | Weather Seal strain relief boot (10 pack) | WSB-195/200 | 3109-445 |
| Silicone Tape | Self-bonding silicone tape (for six connections) | WK-S-1 | WK-S-1 |
| Cold Shrink | Cold Shrink for LMR-200 to LMR-600 | CS-2060T | CS-2060T |
| Ground Kit | Standard ground kit for LMR-195 | GK-S195TT | GK-S195TT |

240

| Installation Tools | Description | Part Number | Stock Code |
|------------------------|---|---------------------|------------|
| Combination Strip Tool | Prep Tool for LMR-240 | CST-240A | 3192-152 |
| Crimp Tool | Crimp tool for LMR-195,200 and 240 | CT-240/200/195/100 | 3192-256 |
| Universal Crimp Tool | Universal, heavy-duty crimp handle | CT-U | 3192-181 |
| Crimp Dies | LMR-240 crimp dies (0.255" hex) for use with the CT-U | Y375 | 3190-608 |
| Cutting Tool | Spring loaded LMR cutting tool | CCT-03 | 3192-267 |
| Pin Crimp Tool | Pin Crimp Tool for N's, 4.3's and 7/16 DIN's | PCT-401 | 3192-216 |
| Debur Tool | Center conductor debur tool | DBT-U | 3192-001 |
| Replacement Blade Kit | Replacement blade for all CST prepping tools | RB-CST | 3192-086 |
| | Replacement blade for the CCT-03 cutting tool | RB-03 | 3192-337 |
| Tool Pouch | Embroided tool pouch with zipper | FKP-01 | 3190-584 |
| Hardcase Tool Kit | Connector Attachment Tools for LMR-195, 200 and 240 | TK-195/200/240EZ-HC | 660-1206 |
| Hardware | Description | Part Number | Stock Code |
| Weather Seal Boot | Weather Seal strain relief boot (10 pack) | WSB-240 | 3109-400 |
| Silicone Tape | Self-bonding silicone tape (for six connections) | WK-S-1 | WK-S-1 |
| Cold Shrink | Cold Shrink for LMR-200 to LMR-600 | CS-2060T | CS-2060T |
| Ground Kit | Standard ground kit for LMR-240 | GK-S240TT | GK-S240TT |

400

| Installation Tools | Description | Part Number | Stock Code |
|------------------------|--|--------------------|------------|
| Combination Strip Tool | Prep Tool for LMR-400 | CST-400 | 3192-004 |
| Crimp Tool | Crimp tool for LMR-400 | CT-400/300 | 3190-666 |
| Universal Crimp Tool | Universal, heavy-duty crimp handle | CT-U | 3192-181 |
| Crimp Dies | LMR-400 crimp dies (0.429" hex) for use with the CT-U | Y1719 | 3190-202 |
| Cutting Tool | Spring loaded LMR cutting tool | CCT-03 | 3192-267 |
| Mid-Span Strip Tool | Prep Tool for Ground Strap Attachment | GST-400A | 3190-2174 |
| Pin Crimp Tool | Pin Crimp Tool for N's, 4.3's and 7/16 DIN's | PCT-400 | 3192-217 |
| Replacement Blade Kit | Replacement blade for all CST prepping tools | RB-CST | 3192-086 |
| | Replacement blade for the CCT-03 cutting tool | RB-03 | 3192-337 |
| Tool Pouch | Embroided tool pouch with zipper | FKP-01 | 3190-584 |
| Hardcase Tool Kit | Connector Attachment Tools for LMR-400 and LMR-400-75 | TK-400/400-75EZ-HC | 660-1266 |
| Soft Pouch Tool Kit | Connector Attachment Tools for LMR-400 | TK-400EZ | 3190-1601 |
| Hardware | Description | Part Number | Stock Code |
| Weather Seal Boot | Weather Seal strain relief boot (10 pack) | WSB-400 | 3109-394 |
| | Over connector weather protection for LMR-400 and N male | WPB-400-NM | 3192-6122 |
| Silicone Tape | Self-bonding silicone tape (for six connections) | WK-S-1 | WK-S-1 |
| Weather Seal Kit | Universal weather proofing kit (for six connections) | WK-U | WK-U |
| Cold Shrink | Cold Shrink for LMR-200 to LMR-600 | CS-2060T | CS-2060T |
| | Cold Shrink for LMR-400 to LMR-600 | CS-4060T | CS-4060T |
| Ground Kit | Standard ground kit for LMR-400 | GK-S400TT | GK-S400TT |
| Pull Hoist | pre-laced pull hoist for LMR-400 | HG-400T | HG-400T |
| Hangers | Standard hanger for LMR-400 and LMR-600 | BH-S38-NH | BH-S38-NH |
| Support Blocks | Mini coax support blocks for LMR-400 | CB-400T | CB-400T |

600

| Installation Tools | Description | Part Number | Stock Code |
|------------------------|---|-------------|------------|
| Combination Strip Tool | Prep Tool for LMR-600 | CST-600 | 3192-052 |
| Crimp Tool | Crimp tool for LMR-600 | CT-600 | 3192-170 |
| Universal Crimp Tool | Universal, heavy-duty crimp handle | CT-U | 3192-181 |
| Crimp Dies | LMR-600 crimp dies (0.610" hex) for use with the CT-U | Y1720 | 3190-203 |
| Cutting Tool | LMR cutting tool | CCT-02 | 3192-165 |
| Mid-Span Strip Tool | Prep Tool for Ground Strap Attachment | GST-600A | 3190-1051 |
| Pin Crimp Tool | Pin Crimp Tool for N's, 4.3's and 7/16 DIN's | PCT-600 | 3192-266 |
| Replacement Blade Kit | Replacement blade for all CST prepping tools | RB-CST | 3192-086 |
| | Replacement blade for the CCT-02 cutting tool | RB-02 | 3192-166 |
| Tool Pouch | Embroided tool pouch with zipper | FKP-01 | 3190-584 |
| Soft Pouch Tool Kit | Connector Attachment Tools for LMR-600 | TK-600EZ | 3190-1602 |

| Hardware | Description | Part Number | Stock Code |
|-------------------|--|-------------|------------|
| Weather Seal Boot | Weather Seal strain relief boot (10 pack) | WSB-600 | 3109-401 |
| | Over connector weather protection for LMR-600 and N male | WPB-600-NM | 3192-6163 |
| Silicone Tape | Self-bonding silicone tape (for six connections) | WK-S-1 | WK-S-1 |
| Weather Seal Kit | Universal weather proofing kit (for six connections) | WK-U | WK-U |
| Cold Shrink | Cold Shrink for LMR-200 to LMR-600 | CS-2060T | CS-2060T |
| Cold Shrink | Cold Shrink for LMR-400 to LMR-600 | CS-4060T | CS-4060T |
| Ground Kit | Standard ground kit for LMR-600 | GK-S600TT | GK-S600TT |
| Pull Hoist | Lace-up pull hoist for LMR-600 | HG-600T | HG-600T |
| Hangers | Standard hanger for LMR-400 and LMR-600 | BH-S38-NH | BH-S38-NH |
| Support Blocks | Mini coax support blocks for LMR-600 | CB-600T | CB-600T |

900

| Installation Tools | Description | Part Number | Stock Code |
|-----------------------|---|-------------|------------|
| Strip Tool | Prep Tool for LMR-900 | ST-900C | 3190-1310 |
| Cutting Tool | LMR cutting tool | CCT-02 | 3192-165 |
| Wrench | 1 1/4" open end wrench (2 required) | WR-900 | 3190-509 |
| Mid-Span Strip Tool | Prep Tool for Ground Strap Attachment | GST-900A | 3190-435 |
| Replacement Blade Kit | Replacement blade for the CCT-02 cutting tool | RB-02 | 3192-166 |
| Tool Pouch | Embroided tool pouch with zipper | FKP-01 | 3190-584 |

| Hardware | Description | Part Number | Stock Code |
|------------------|--|-------------|------------|
| Silicone Tape | Self-bonding silicone tape (for six connections) | WK-S-1 | WK-S-1 |
| Weather Seal Kit | Universal weather proofing kit (for six connections) | WK-U | WK-U |
| Cold Shrink | Cold Shrink for LMR-600 to LMR-1200 | CS-60120T | CS-60120T |
| Ground Kit | Standard ground kit for LMR-900 | GK-S900TT | GK-S900TT |
| Pull Hoist | Lace-up pull hoist for LMR-900 | HG-900T | HG-900T |
| Hangers | Butterfly hanger for LMR-900 | BH-58-NH | BH-58-NH |
| Support Blocks | Mini coax support blocks for LMR-900 | CB-900T | CB-900T |

1200

| Installation Tools | Description | Part Number | Stock Code |
|-----------------------|---|-------------|------------|
| Strip Tool | Prep Tool for LMR-1200 | ST-1200CH | 3192-124 |
| Cutting Tool | LMR cutting tool | CCT-02 | 3192-165 |
| Wrench | 1 9/16" open end wrench (1 required) | WR-1200A | 3192-385 |
| | 1 7/16" open end wrench (1 required) | WR-1200B | 3190-511 |
| Mid-Span Strip Tool | Prep Tool for Ground Strap Attachment | GST-1200A | 3190-436 |
| Replacement Blade Kit | Replacement blade for the CCT-02 cutting tool | RB-02 | 3192-166 |
| Tool Pouch | Embroided tool pouch with zipper | FKP-01 | 3190-584 |

| Hardware | Description | Part Number | Stock Code |
|------------------|--|-------------|------------|
| Silicone Tape | Self-bonding silicone tape (for six connections) | WK-S-1 | WK-S-1 |
| Weather Seal Kit | Universal weather proofing kit (for six connections) | WK-U | WK-U |
| Cold Shrink | Cold Shrink for LMR-600 to LMR-1200 | CS-60120T | CS-60120T |
| Ground Kit | Standard ground kit for LMR-1200 | GK-S1200TT | GK-S1200TT |
| Pull Hoist | Lace-up pull hoist for LMR-1200 | HG-1200T | HG-1200T |
| Hangers | Butterfly hanger for LMR-1200 | BH-78-NH | BH-78-NH |
| Support Blocks | Mini coax support blocks for LMR-1200 | CB-1200T | CB-1200T |

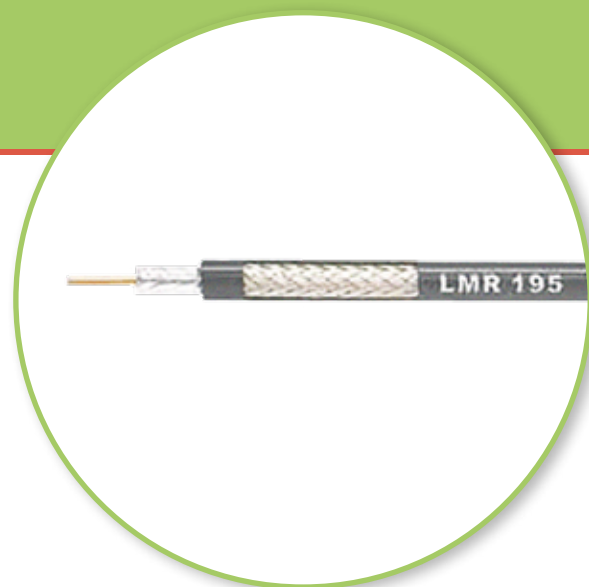
Specifications

Ω Impedance 50 Ohms

Op Temp -40 to +185°F
-40 to +85°C

Units

| | | |
|---------------------------|-------------------|--------------|
| Diameter | in (mm) | 0.195 (4.95) |
| Weight | lb/ft (kg/m) | 0.021 (0.03) |
| Bend Radius: Installation | in (mm) | 0.5 (12.7) |
| Bend Radius: Repeated | in (mm) | 2.0 (50.8) |
| Bending Moment | ft-lb (N-m) | 0.1 (0.14) |
| Tensile Strength | lb (kg) | 40 (18.2) |
| Flat Plate Crush | lb/in. (kg/mm) | 10 (0.18) |
| Maximum Frequency | GHz | 6 |
| Velocity of Propagation | % | 74 |
| Dielectric Constant | NA | 1.56 |
| Time Delay | nS/ft (nS/m) | 1.27 (4.17) |
| Capacitance | pF/ft (pF/m) | 25.4 (83.3) |
| Inductance | uH/ft (uH/m) | 0.064 (0.21) |
| Shielding Effectiveness | dB | >90 |
| Inner Conductor | Ohms/1000ft (/km) | 9.5 (31.2) |
| Outer Conductor | Ohms/1000ft (/km) | 4.8 (16.1) |
| Voltage Withstand | Volts DC | 1000 |
| Jacket Spark | Volts RMS | 3000 |
| Peak Power | kW | 2.5 |



Calculation

$$IL = (K1 \times v(f) + K2 \times f) \times \text{Cable Length}$$

Cable Insertion Loss
f = Frequency (MHz)

Use K values with
matching length unit

| K values | dB/100ft | dB/100m |
|----------|----------|-------------|
| K1 | 0.424232 | 1.391905192 |
| K2 | 0.000563 | 0.001847203 |

Connectors

| Gender | Description | Coupling Nut | Part Number | Stock Code | Connector Code |
|--------|------------------|--------------|-----------------|------------|----------------|
| FME | Straight Jack | Hex | TC-195-FMEF-X | 3190-6249 | FME |
| N | Straight Plug | Hex/Knurl | TC-195-NMH-X | 3190-6543 | NM |
| | Right Angle Plug | Hex/Knurl | TC-195-NMH-RA-D | 3190-6542 | NMR |
| SMA | Straight Plug | Hex | TC-195-SM-SS-X | 3190-2878 | SM |
| TNC | Straight Plug | Hex/Knurl | TC-195-TM-X | 3190-6568 | TM |

*Connector part numbers in bold text are the default connectors for LMR-195-UF cable assemblies

INNER CONDUCTOR

Stranded BC 0.038 in (0.97 mm)

OUTER CONDUCTOR

Aluminum Tape 0.116 in (2.95 mm)

JACKET

(Part Description table) 0.195 in (4.95 mm)

DIELECTRIC

Foam PE 0.110 in (2.79 mm)

OVERALL BRAID

Tinned Copper 0.139 in (3.53 mm)

Part Description

| Part-Number | Application | Jacket | Color | Stock Code | Cable Code |
|---------------|----------------|--------|-------|------------|------------|
| LMR-195-UF | Indoor/Outdoor | TPE | Black | 54212 | LUF195 |
| LMR-195-UF-FR | Indoor/Outdoor | FRPE | Black | 54360 | LF195 |

* LMR-FR is a low-smoke, zero-halogen cable. See page 54 for performance details

Assembly Ordering Guide

XXXXXX

Cable Code

-XXX

Connector A

XXX-

Connector B

XX.X

Length

X

Units of measure: I = Inches, F = Feet, M = Meters

*Refer to the Part Description table to select your desired Cable Code **Refer to the Connector table on page 23 to select your desired connector

Specifications

Impedance
50 Ohms

Op Temp
-40 to +185°F
-40 to +85°C

Units

| | | |
|---------------------------|-------------------|--------------|
| Diameter | in (mm) | 0.240 (6.10) |
| Weight | lb/ft (kg/m) | 0.034 (0.05) |
| Bend Radius: Installation | in (mm) | 0.75 (19.1) |
| Bend Radius: Repeated | in (mm) | 2.5 (63.5) |
| Bending Moment | ft-lb (N-m) | 0.125 (0.17) |
| Tensile Strength | lb (kg) | 80 (36.3) |
| Flat Plate Crush | lb/in. (kg/mm) | 13 (0.23) |
| Maximum Frequency | GHz | 6 |
| Velocity of Propagation | % | 80 |
| Dielectric Constant | NA | 1.42 |
| Time Delay | nS/ft (nS/m) | 1.21 (3.97) |
| Capacitance | pF/ft (pF/m) | 23.9 (78.4) |
| Inductance | uH/ft (uH/m) | 0.060 (0.20) |
| Shielding Effectiveness | dB | >90 |
| Inner Conductor | Ohms/1000ft (/km) | 4.28 (14.1) |
| Outer Conductor | Ohms/1000ft (/km) | 3.89 (12.8) |
| Voltage Withstand | Volts DC | 1500 |
| Jacket Spark | Volts RMS | 5000 |
| Peak Power | kW | 5.6 |



Calculation

$$IL = (K1 \times v(f) + K2 \times f) \times \text{Cable Length}$$

Cable Insertion Loss
f = Frequency (MHz)

Use K values with
matching length unit

| K values | dB/100ft | dB/100m |
|----------|----------|-------------|
| K1 | 0.290501 | 0.953133781 |
| K2 | 0.000396 | 0.001299276 |

INNER CONDUCTOR

Stranded BC 0.056 in (1.4 mm)

OUTER CONDUCTOR

Aluminum Tape 0.155 in (3.94 mm)

JACKET

(Part Description table) 0.240 in (6.10 mm)

DIELECTRIC

Foam PE 0.150 in (3.81 mm)

OVERALL BRAID

Tinned Copper 0.178 in (4.52 mm)

Part Description

| Part-Number | Application | Jacket | Color | Stock Code | Cable Code |
|---------------|--------------------------|--------|-------|------------|------------|
| LMR-240-UF | Indoor/ Outdoor | TPE | Black | 54041 | LUF240 |
| LMR-240-UF-FR | Indoor/Outdoor Riser CMR | FRPE | Black | 54143 | LFX240 |

* LMR-FR is a low-smoke, zero-halogen cable. See page 54 for performance details

Assembly Ordering Guide

XXXXXX

Cable Code

-XXX

Connector A

XXX-

Connector B

XX.X

Length

X

Units of measure: I = Inches, F = Feet, M = Meters

Connectors

| Gender | Description | Coupling Nut | Part Number | Stock Code | Connector Code | |
|----------|-------------|------------------|--------------|-------------------|----------------|------|
| 4.3/10 | Male | Straight Plug | Hex | TC-240-4310M-X | 3190-6385 | 43M |
| 7/16 DIN | Male | Straight Plug | Hex | TC-240-716M | 3190-2982 | DM |
| | | Right Angle | Hex | TC-240-716M-RA-D | 3190-2983 | DMR |
| BNC | Male | Straight Plug | Knurl | TC-240-BM-X | 3190-6380 | BM |
| | | Right Angle Plug | Knurl | TC-240-BM-RA-D | 3190-6552 | BMR |
| F | Male | Straight Plug | N/A | TC-240-FMEM-X | 3190-6251 | FMEM |
| Mini UHF | Male | Straight Plug | Knurl | TC-240-MUHF | 3190-445 | MUF |
| N | Female | Straight Jack | N/A | TC-240-NF-BH-X | 3190-6545 | NFB |
| | | | | TC-240-NF-PM-X | 3190-2889 | NF |
| | Male | Straight Plug | Hex/Knurl | TC-240-NMH-X | 3190-6381 | NM |
| | | Right Angle Plug | Hex/Knurl | TC-240-NMH-RA-D | 3190-6549 | NMR |
| SMA | Female | Straight Jack | N/A | TC-240-SF-BH-SS-X | 3190-2896 | SF |
| | Male | Straight Plug | Hex | TC-240-SM-SS-X | 3190-2898 | SM |
| | | | | TC-240-SM-RA-SS-D | 3190-6546 | SMR |
| | | | TC-240-SM-RP | 3190-326 | SMRP | |
| TNC | Male | Straight Plug | Hex/Knurl | TC-240-TM-X | 3190-6550 | TM |
| | | Right Angle Plug | Hex/Knurl | TC-240-TM-RA-D | 3190-6547 | TMR |

*Connector part numbers in bold text are the default connectors for LMR-240-UF cable assemblies

Specifications

Ω Impedance 50 Ohms

Op Temp -40 to +185°F
-40 to +85°C

Units

| | | |
|---------------------------|-------------------|---------------|
| Diameter | in (mm) | 0.405 (10.29) |
| Weight | lb/ft (kg/m) | 0.088 (0.131) |
| Bend Radius: Installation | in (mm) | 1.00 (25.4) |
| Bend Radius: Repeated | in (mm) | 4.0 (101.6) |
| Bending Moment | ft-lb (N-m) | 0.375 (0.51) |
| Tensile Strength | lb (kg) | 160 (72.6) |
| Flat Plate Crush | lb/in. (kg/mm) | 20 (0.36) |
| Maximum Frequency | GHz | 6 |
| Velocity of Propagation | % | 83 |
| Dielectric Constant | NA | 1.38 |
| Time Delay | nS/ft (nS/m) | 1.20 (3.92) |
| Capacitance | pF/ft (pF/m) | 23.9 (78.4) |
| Inductance | uH/ft (uH/m) | 0.060 (0.20) |
| Shielding Effectiveness | dB | >90 |
| Inner Conductor | Ohms/1000ft (/km) | 1.07 (3.51) |
| Outer Conductor | Ohms/1000ft (/km) | 1.65 (5.4) |
| Voltage Withstand | Volts DC | 2500 |
| Jacket Spark | Volts RMS | 8000 |
| Peak Power | kW | 16 |



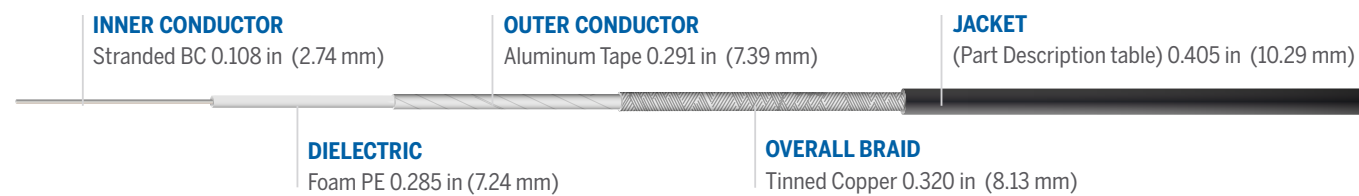
Calculation

$$IL = (K1 \times v(f) + K2 \times f) \times \text{Cable Length}$$

Cable Insertion Loss
f = Frequency (MHz)

Use K values with
matching length unit

| K values | dB/100ft | dB/100m |
|----------|----------|-------------|
| K1 | 0.146748 | 0.481480188 |
| K2 | 0.000312 | 0.001023672 |



Part Description

| Part-Number | Application | Jacket | Color | Stock Code | Cable Code |
|---------------|--------------------------|--------|-------|------------|------------|
| LMR-400-UF | Indoor/Outdoor | TPE | Black | 54040 | LUF400 |
| LMR-400-UF-FR | Indoor/Outdoor Riser CMR | FRPE | Black | 54071 | LFX400 |

* LMR-FR is a low-smoke, zero-halogen cable. See page 54 for performance details

Assembly Ordering Guide

XXXXXX Cable Code
 -XXX Connector A
 XXX- Connector B
 XX.X Length
 X Units of measure: I = Inches, F = Feet, M = Meters

*Refer to the Part Description table to select your desired Cable Code **Refer to the Connector table on page 27 to select your desired connector

Connectors

| Connectors | Gender | Description | Coupling Nut | Part Number | Stock Code | Connector Code |
|------------|--------|------------------|-------------------------|--------------------------|------------|----------------|
| 4.3/10 | Male | Straight Plug | Hex | TC-400-4310M-X | 3190-6272 | 43M |
| | Female | Straight Jack | N/A | TC-400-716FC | 3190-376 | DF |
| 7/16 DIN | Male | Straight plug | Hex | TC-400-716M-X | 3190-2597 | DM |
| | | Right Angle Plug | Hex | TC-400-716MC-RA | 3190-1671 | DMR |
| | | | | TC-400-716M-RA-D | 3190-2598 | DMR |
| BNC | Male | Straight Plug | Knurl | TC-400-BM-X | 3190-6232 | BM |
| | | Right Angle Plug | Knurl | TC-400-BM-RA-D | 3190-6430 | BMR |
| HN | Male | Straight Plug | Knurl | TC-400-HNM | 3190-923 | HNM |
| | | Right Angle Plug | Hex/Knurl | TC-400-HNM-RA | 3190-2541 | HNMR |
| Mini UHF | | Straight Plug | Knurl | TC-400-MUHF | 3190-520 | MUF |
| N | Female | Straight Jack | N/A | TC-400-NF-X | 3190-2815 | NF |
| | | | | TC-400-NF-BH-X | 3190-8219 | NFB |
| | Male | Straight Plug | Knurl | TC-400-NM | 3190-1454 | NM |
| | | | | TC-400-NM-RP | 3190-960 | NMRP |
| | | Right Angle Plug | Hex/Knurl | TC-400-NMC-2 | 3190-6077 | NM |
| | | | | TC-400-NMH-X | 3190-2626 | NM |
| | | Hex/Knurl | TC-400-NMH-RA-D | 3190-2293 | NMR | |
| | | Hex | TC-400-NMH-RA-SS | 3190-1668 | NMR | |
| QN | Male | Straight Plug | Knurl | TC-400-QNM-X | 3190-6212 | QNM |
| SMA | Female | Straight Jack | N/A | TC-400-SF-X | 3190-6174 | SF |
| | Male | Straight Plug | Solder | TC-400-SM-X | 3190-3046 | SM |
| TNC | Female | Straight Jack | N/A | TC-400-TF-X | 3190-3051 | TF |
| | | | | TC-400-TF-RP | 3190-1063 | TFRP |
| | Male | Straight Plug | Knurl | TC-400-TM-RP | 3190-1062 | TMRP |
| | | | | TC-400-TM-X | 3190-2532 | TM |
| | | Right Angle Plug | Hex/Knurl | TC-400-TM-RA-D | 3190-2671 | TMR |
| | | | | TC-400-TM-RP-RA-D | 3190-6147 | TMRP |

*Connector part numbers in bold text are the default connectors for LMR-400-UF cable assemblies

Specifications

Impedance
50 Ohms

Op Temp
-40 to +185°F
-40 to +85°C

Units

| | | |
|---------------------------|-------------------|---------------|
| Diameter | in (mm) | 0.590 (14.99) |
| Weight | lb/ft (kg/m) | 0.165 (0.25) |
| Bend Radius: Installation | in (mm) | 1.50 (38.1) |
| Bend Radius: Repeated | in (mm) | 6.0 (152.4) |
| Bending Moment | ft-lb (N-m) | 1.75 (2.37) |
| Tensile Strength | lb (kg) | 350 (158.9) |
| Flat Plate Crush | lb/in. (kg/mm) | 40 (0.71) |
| Maximum Frequency | GHz | 6 |
| Velocity of Propagation | % | 87 |
| Dielectric Constant | NA | 1.32 |
| Time Delay | nS/ft (nS/m) | 1.17 (3.83) |
| Capacitance | pF/ft (pF/m) | 23.4 (76.6) |
| Inductance | uH/ft (uH/m) | 0.058 (0.19) |
| Shielding Effectiveness | dB | >90 |
| Inner Conductor | Ohms/1000ft (/km) | 0.43 (1.42) |
| Outer Conductor | Ohms/1000ft (/km) | 1.2 (3.9) |
| Voltage Withstand | Volts DC | 4000 |
| Jacket Spark | Volts RMS | 8000 |
| Peak Power | kW | 40 |



Calculation

$$IL = (K1 \times \sqrt{f}) + K2 \times f \times \text{Cable Length}$$

Cable Insertion Loss
f = Frequency (MHz)

Use K values with
matching length unit

| K values | dB/100ft | dB/100m |
|----------|-----------|-------------|
| K1 | 0.0763055 | 0.250358346 |
| K2 | 0.0002626 | 0.000861591 |



Part Description

| Part-Number | Application | Jacket | Color | Stock Code | Cable Code |
|---------------|--------------------------|--------|-------|------------|------------|
| LMR-600-UF | Indoor/Outdoor | TPE | Black | 54044 | LUF600 |
| LMR-600-UF-FR | Indoor/Outdoor Riser CMR | FRPE | Black | 54310 | LFX600 |

* LMR-FR is a low-smoke, zero-halogen cable. See page 54 for performance details

Assembly Ordering Guide

XXXXXX Cable Code
 -XXX Connector A
 XXX- Connector B
 XX.X Length
 X Units of measure: I = Inches, F = Feet, M = Meters

*Refer to the Part Description table to select your desired Cable Code **Refer to the Connector table on page 29 to select your desired connector

Connectors

| Gender | Description | Coupling Nut | Part Number | Stock Code | Connector Code | |
|----------|-------------|------------------|-------------|-------------------------|----------------|------|
| 4.3/10 | Male | Straight Plug | Hex | TC-600-4310M-X | 3190-6273 | 43M |
| 7/16 DIN | Female | Straight Jack | N/A | TC-600-716FC | 3190-375 | DF |
| | Male | Straight Plug | Hex | TC-600-716M-X | 3190-2642 | DM |
| BNC | Male | Right Angle Plug | Hex | TC-600-716M-RA-D | 3190-6211 | DMR |
| | Female | Straight Jack | N/A | TC-600-BM-RA-D | 3190-2734 | BMR |
| HN | Male | Straight Plug | Knurl | TC-600-HNMC | 3190-1429 | HNM |
| LC | Male | Straight Plug | Hex | TC-600-LCM | 3190-1406 | LCM |
| N | Female | Straight Jack | N/A | TC-600-NF-X | 3190-2816 | NF |
| | Male | Straight Plug | Hex/Knurl | TC-600-NMC-2-D | 3190-6122 | NM |
| | | Right Angle Plug | Hex/Knurl | TC-600-NMH-X | 3190-2628 | NM |
| TNC | Female | Straight Jack | Knurl | TC-600-UM-X | 3190-8172 | UM |
| | Male | Straight Plug | Hex/Knurl | TC-600-NMH-RA-D | 3190-2427 | NMR |
| | | Right Angle Plug | Hex/Knurl | TC-600-TF-X | 3190-3052 | TF |
| UHF | Female | Straight Jack | Knurl | TC-600-TF-RP | 3190-1065 | TFRP |
| | Male | Straight Plug | Knurl | TC-600-TM-RP | 3190-1064 | TMRP |
| | | Right Angle Plug | Hex/Knurl | TC-600-TM-X | 3190-2530 | TM |
| | | | | TC-600-TM-RA-D | 3190-2707 | TMR |
| | | | | TC-600-UMC | 3190-213 | UMC |

*Connector part numbers in bold text are the default connectors for LMR-600-UF cable assemblies

195

| Installation Tools | Description | Part Number | Stock Code |
|------------------------|---|--------------------|------------|
| Combination Strip Tool | Prep Tool for LMR-195 and 200 | CST-195/200 | 3192-102 |
| Crimp Tool | Crimp tool for LMR-195,200 and 240 | CT-240/200/195/100 | 3192-256 |
| Universal Crimp Tool | Universal, heavy-duty crimp handle | CT-U | 3192-181 |
| Crimp Dies | LMR-195 crimp dies (0.213" hex) for use with the CT-U | Y197 | 3190-610 |
| Replacement Blade Kit | Replacement blade for all CST prepping tools | RB-CST | 3192-086 |
| Tool Pouch | Embroided tool pouch with zipper | FKP-01 | 3190-584 |

| Hardware | Description | Part Number | Stock Code |
|---------------|--|-------------|------------|
| Silicone Tape | Self-bonding silicone tape (for six connections) | WK-S-1 | WK-S-1 |
| Cold Shrink | Cold Shrink for LMR-200 to LMR-600 | CS-2060T | CS-2060T |

240

| Installation Tools | Description | Part Number | Stock Code |
|------------------------|---|--------------------|------------|
| Combination Strip Tool | Prep Tool for LMR-240 | CST-240A | 3192-152 |
| Crimp Tool | Crimp tool for LMR-195,200 and 240 | CT-240/200/195/100 | 3192-256 |
| Universal Crimp Tool | Universal, heavy-duty crimp handle | CT-U | 3192-181 |
| Crimp Dies | LMR-240 crimp dies (0.255" hex) for use with the CT-U | Y375 | 3190-608 |
| Pin Crimp Tool | Pin Crimp Tool for N's, 4.3's and 7/16 DIN's | PCT-401 | 3192-216 |
| Replacement Blade Kit | Replacement blade for all CST prepping tools | RB-CST | 3192-086 |
| Tool Pouch | Embroided tool pouch with zipper | FKP-01 | 3190-584 |

| Hardware | Description | Part Number | Stock Code |
|-------------------|--|-------------|------------|
| Weather Seal Boot | Weather Seal strain relief boot (10 pack) | WSB-240 | 3109-400 |
| Silicone Tape | Self-bonding silicone tape (for six connections) | WK-S-1 | WK-S-1 |
| Cold Shrink | Cold Shrink for LMR-200 to LMR-600 | CS-2060T | CS-2060T |

400

| Installation Tools | Description | Part Number | Stock Code |
|------------------------|---|-------------|------------|
| Combination Strip Tool | Prep Tool for LMR-400 | CST-400 | 3192-004 |
| Crimp Tool | Crimp tool for LMR-400 | CT-400/300 | 3190-666 |
| Universal Crimp Tool | Universal, heavy-duty crimp handle | CT-U | 3192-181 |
| Crimp Dies | LMR-400 crimp dies (0.429" hex) for use with the CT-U | Y1719 | 3190-202 |
| Pin Crimp Tool | Pin Crimp Tool for N's, 4.3's and 7/16 DIN's | PCT-400 | 3192-217 |
| Replacement Blade Kit | Replacement blade for all CST prepping tools | RB-CST | 3192-086 |
| Tool Pouch | Embroided tool pouch with zipper | FKP-01 | 3190-584 |

| Hardware | Description | Part Number | Stock Code |
|-------------------|--|-------------|------------|
| Weather Seal Boot | Over connector weather protection for LMR-400 and N male | WPB-400-NM | 3192-6122 |
| Silicone Tape | Self-bonding silicone tape (for six connections) | WK-S-1 | WK-S-1 |
| Weather Seal Kit | Universal weather proofing kit (for six connections) | WK-U | WK-U |
| Cold Shrink | Cold Shrink for LMR-200 to LMR-600 | CS-2060T | CS-2060T |
| | Cold Shrink for LMR-400 to LMR-600 | CS-4060T | CS-4060T |

600

| Installation Tools | Description | Part Number | Stock Code |
|------------------------|---|-------------|------------|
| Combination Strip Tool | Prep Tool for LMR-600 | CST-600 | 3192-052 |
| Crimp Tool | Crimp tool for LMR-600 | CT-600 | 3192-170 |
| Universal Crimp Tool | Universal, heavy-duty crimp handle | CT-U | 3192-181 |
| Crimp Dies | LMR-600 crimp dies (0.610" hex) for use with the CT-U | Y1720 | 3190-203 |
| Pin Crimp Tool | Pin Crimp Tool for N's, 4.3's and 7/16 DIN's | PCT-600 | 3192-266 |
| Replacement Blade Kit | Replacement blade for all CST prepping tools | RB-CST | 3192-086 |

| Hardware | Description | Part Number | Stock Code |
|-------------------|--|-------------|------------|
| Weather Seal Boot | Over connector weather protection for LMR-600 and N male | WPB-600-NM | 3192-6163 |
| Silicone Tape | Self-bonding silicone tape (for six connections) | WK-S-1 | WK-S-1 |
| Weather Seal Kit | Universal weather proofing kit (for six connections) | WK-U | WK-U |
| Cold Shrink | Cold Shrink for LMR-200 to LMR-600 | CS-2060T | CS-2060T |
| | Cold Shrink for LMR-400 to LMR-600 | CS-4060T | CS-4060T |

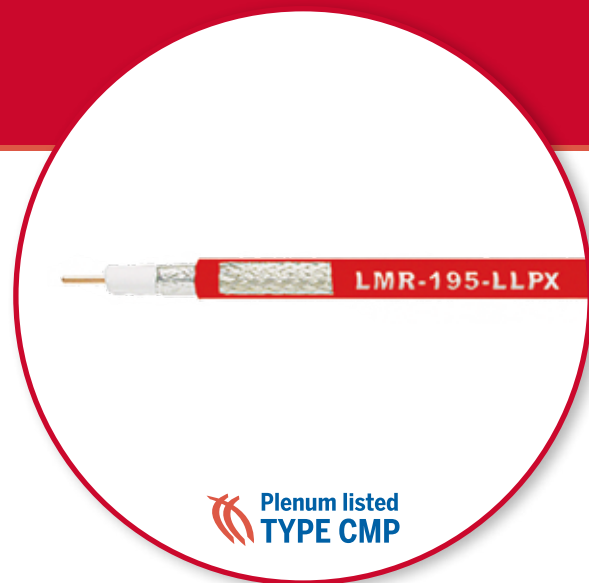
Specifications

Ω Impedance 50 Ohms

Op Temp -40 to +257°F -40 to +125°C

Units

| | | |
|---------------------------|-------------------|--------------|
| Diameter | in (mm) | 0.175 (4.45) |
| Weight | lb/ft (kg/m) | 0.021 (0.03) |
| Bend Radius: Installation | in (mm) | 0.5 (12.7) |
| Bend Radius: Repeated | in (mm) | 2.0 (50.8) |
| Bending Moment | ft-lb (N-m) | 0.1 (0.14) |
| Tensile Strength | lb (kg) | 40 (18.2) |
| Flat Plate Crush | lb/in. (kg/mm) | 10 (0.19) |
| Maximum Frequency | GHz | 8 |
| Velocity of Propagation | % | 76 |
| Dielectric Constant | NA | 1.73 |
| Time Delay | nS/ft (nS/m) | 1.34 (4.40) |
| Capacitance | pF/ft (pF/m) | 26.7 (87.6) |
| Inductance | uH/ft (uH/m) | 0.067 (0.22) |
| Shielding Effectiveness | dB | >90 |
| Inner Conductor | Ohms/1000ft (/km) | 7.6 (24.9) |
| Outer Conductor | Ohms/1000ft (/km) | 4.9 (16.1) |
| Voltage Withstand | Volts DC | 1000 |
| Jacket Spark | Volts RMS | 3000 |
| Peak Power | kW | 2.5 |

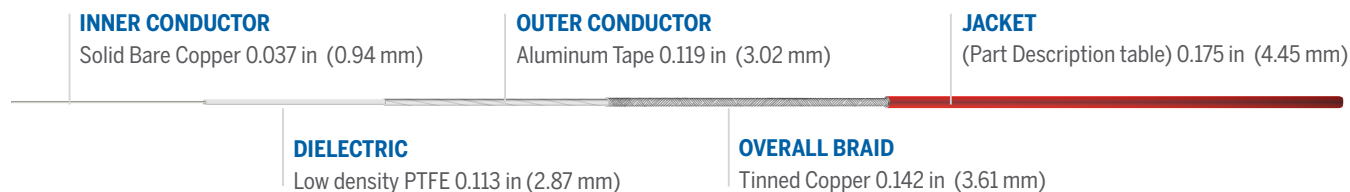


Calculation

$$IL = (K1 \times v(f) + K2 \times f) \times \text{Cable Length}$$

Cable Insertion Loss f = Frequency (MHz) Use K values with matching length unit

| K values | dB/100ft | dB/100m |
|----------|------------|-------------|
| K1 | 0.36042759 | 1.182562923 |
| K2 | 0.0004747 | 0.001557491 |



Part Description

| Part-Number | Application | Jacket | Color | Stock Code | Cable Code |
|--------------|---------------------------|--------------------|-------|------------|------------|
| LMR-195-LLPX | Indoor/Outdoor Plenum CMP | PVDF Fluoropolymer | Red | 54425 | LPX195 |

Assembly Ordering Guide



*Refer to the Part Description table to select your desired Cable Code **Refer to the Connector table on page 33 to select your desired connector

Connectors

| Gender | Description | Coupling Nut | Part Number | Stock Code | Connector Code |
|--------|------------------|--------------|------------------------|------------|----------------|
| N | Straight Plug | Hex/Knurl | TC-195-NMH-X | 3190-6543 | NM |
| | Right Angle Plug | Hex/Knurl | TC-195-NMH-RA-D | 3190-6542 | NMR |
| SMA | Straight Plug | Hex | TC-195-SM-SS-X | 3190-2878 | SM |
| TNC | Straight Plug | Hex/Knurl | TC-195-TM-X | 3190-6568 | TM |

*Connector part numbers in bold text are the default connectors for LMR-195-LLPX cable assemblies

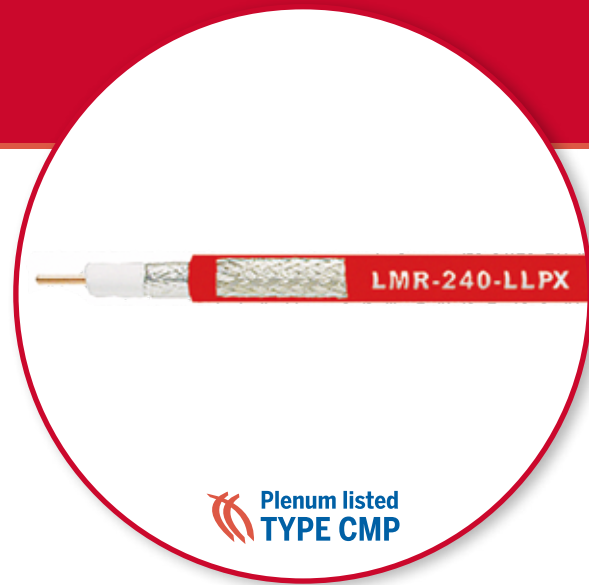
Specifications

Ω Impedance 50 Ohms

Op Temp -40 to +257°F
-40 to +125°C

Units

| | | |
|---------------------------|-------------------|---------------|
| Diameter | in (mm) | 0.205 (5.21) |
| Weight | lb/ft (kg/m) | 0.040 (0.006) |
| Bend Radius: Installation | in (mm) | 1.0 (25.4) |
| Bend Radius: Repeated | in (mm) | 2.0 (50.8) |
| Bending Moment | ft-lb (N-m) | 0.25 (0.34) |
| Tensile Strength | lb (kg) | 60 (27.22) |
| Flat Plate Crush | lb/in. (kg/mm) | 85 (1.52) |
| Maximum Frequency | GHz | 8 |
| Velocity of Propagation | % | 76 |
| Dielectric Constant | NA | 1.73 |
| Time Delay | nS/ft (nS/m) | 1.34 (4.40) |
| Capacitance | pF/ft (pF/m) | 26.7 (87.6) |
| Inductance | uH/ft (uH/m) | 0.067 (0.22) |
| Shielding Effectiveness | dB | >90 |
| Inner Conductor | Ohms/1000ft (/km) | 4.0 (13.1) |
| Outer Conductor | Ohms/1000ft (/km) | 3.9 (12.8) |
| Voltage Withstand | Volts DC | 1500 |
| Jacket Spark | Volts RMS | 5000 |
| Peak Power | kW | 5.6 |

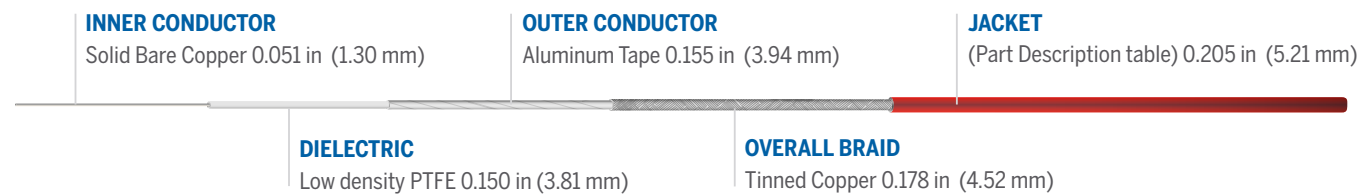


Calculation

$$IL = (K1 \times \sqrt{f}) + K2 \times f \times \text{Cable Length}$$

Cable Insertion Loss f = Frequency (MHz) Use K values with matching length unit

| K values | dB/100ft | dB/100m |
|----------|----------|------------|
| K1 | 0.27337 | 0.89692697 |
| K2 | 0.0002 | 0.0006562 |



Part Description

| Part-Number | Application | Jacket | Color | Stock Code | Cable Code |
|--------------|---------------------------|--------------------|-------|------------|------------|
| LMR-240-LLPX | Indoor/Outdoor Plenum CMP | PVDF Fluoropolymer | Red | 54459 | LPX240 |

Assembly Ordering Guide



*Refer to the Part Description table to select your desired Cable Code **Refer to the Connector table on page 35 to select your desired connector

Connectors

| Connectors | Gender | Description | Coupling Nut | Part Number | Stock Code | Connector Code |
|------------|---------------|------------------|-------------------|-------------------|------------|----------------|
| 4.3/10 | Male | Straight Plug | Hex | TC-240-4310M-X | 3190-6385 | 43M |
| 7/16 DIN | Male | Straight Plug | Hex | TC-240-716M | 3190-2982 | DM |
| | | Right Angle Plug | Hex | TC-240-716M-RA-D | 3190-2983 | DMR |
| BNC | Male | Straight Plug | Knurl | TC-240-BM-X | 3190-6380 | BM |
| | | Right Angle Plug | Knurl | TC-240-BM-RA-D | 3190-6552 | BMR |
| FME | Male | Straight Plug | N/A | TC-240-FMEM-X | 3190-6251 | FMEM |
| Mini UHF | Male | Straight Plug | Knurl | TC-240-MUHF | 3190-445 | MUF |
| N | Female | Straight Jack | N/A | TC-240-NF-BH-X | 3190-6545 | NFB |
| | Male | Straight Plug | Hex/Knurl | TC-240-NMH-X | 3190-6381 | NM |
| SMA | Female | Straight Jack | N/A | TC-240-NF-PM-X | 3190-2889 | NF |
| | | | | TC-240-SF-BH-SS-X | 3190-2896 | SF |
| | Male | Straight Plug | Hex | EZ-240-SM-PL-X | 3190-3075 | SM |
| | | | | TC-240-SM-SS-X | 3190-2898 | SM |
| TNC | Female | Straight Jack | N/A | TC-240-SM-RA-SS-D | 3190-6546 | SMR |
| | | | | TC-240-SM-RP | 3190-326 | SMRP |
| | | | | EZ-240-TF-PL-X | 3190-6372 | TF |
| Male | Straight Plug | Hex/Knurl | EZ-240-TM-PL-X | 3190-6373 | TM | |
| | | | EZ-240-TM-RP-PL-X | 3190-6404 | TMRP | |
| | | | TC-240-TM-X | 3190-6550 | TM | |
| | | Right Angle Plug | Hex/Knurl | TC-240-TM-RA-D | 3190-6547 | TMR |

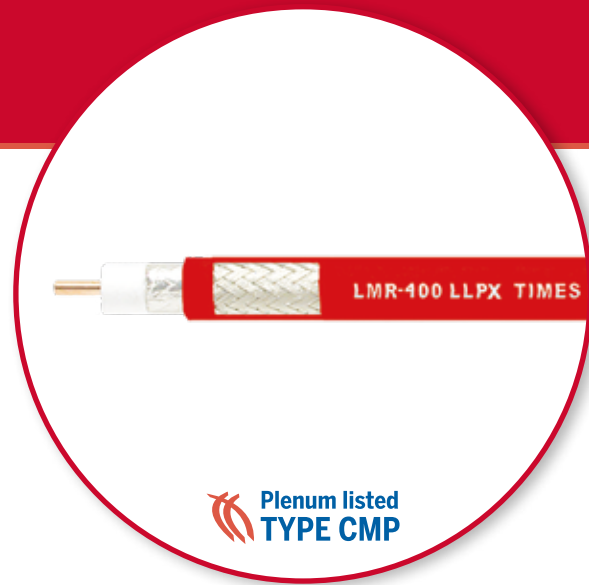
*Connector part numbers in bold text are the default connectors for LMR-240-LLPX cable assemblies

Specifications

Impedance 50 Ohms
Op Temp -40 to +257°F
-40 to +125°C

Units

| | | |
|---------------------------|-------------------|--------------|
| Diameter | in (mm) | 0.37 (9.40) |
| Weight | lb/ft (kg/m) | 0.104 (0.15) |
| Bend Radius: Installation | in (mm) | 1.8 (44.5) |
| Bend Radius: Repeated | in (mm) | 4.0 (101.6) |
| Bending Moment | ft-lb (N-m) | 0.5 (0.68) |
| Tensile Strength | lb (kg) | 120 (54.5) |
| Flat Plate Crush | lb/in. (kg/mm) | 185 (3.31) |
| Maximum Frequency | GHz | 6 |
| Velocity of Propagation | % | 76 |
| Dielectric Constant | NA | 1.73 |
| Time Delay | nS/ft (nS/m) | 1.34 (4.40) |
| Capacitance | pF/ft (pF/m) | 26.7 (87.6) |
| Inductance | uH/ft (uH/m) | 0.067 (0.22) |
| Shielding Effectiveness | dB | >90 |
| Inner Conductor | Ohms/1000ft (/km) | 1.8 (5.9) |
| Outer Conductor | Ohms/1000ft (/km) | 1.65 (5.4) |
| Voltage Withstand | Volts DC | 2500 |
| Jacket Spark | Volts RMS | 8000 |
| Peak Power | kW | 16 |

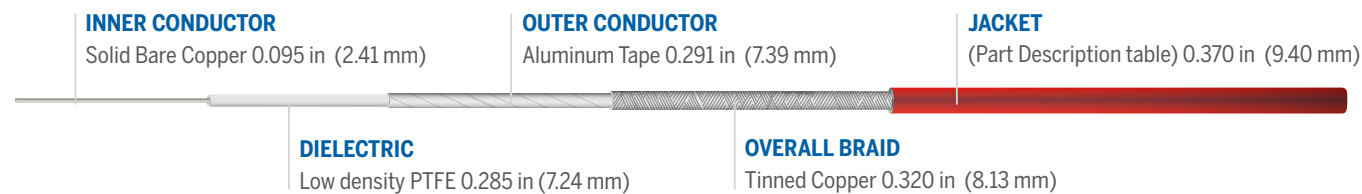


Calculation

$$IL = (K1 \times v(f) + K2 \times f) \times \text{Cable Length}$$

Cable Insertion Loss
f = Frequency (MHz)
Use K values with matching length unit

| K values | dB/100ft | dB/100m |
|----------|----------|------------|
| K1 | 0.12914 | 0.42370834 |
| K2 | 0.00015 | 0.00049215 |



Part Description

| Part-Number | Application | Jacket | Color | Stock Code | Cable Code |
|--------------|----------------|--------------------|-------|------------|------------|
| LMR-400-LLPX | Indoor/Outdoor | PVDF Fluoropolymer | Red | 54470 | LPX400 |

Assembly Ordering Guide



*Refer to the Part Description table to select your desired Cable Code **Refer to the Connector table on page 37 to select your desired connector

Connectors

| Connectors | Gender | Description | Coupling Nut | Part Number | Stock Code | Connector Code |
|------------|------------------|------------------|--------------------------|-------------------------|------------|----------------|
| 4.3/10 | Male | Straight Plug | Hex | TC-400-4310M-X | 3190-6272 | 43M |
| | | Straight Plug | Hex | TC-400-716M-X | 3190-2597 | DM |
| 7/16 DIN | Male | Right Angle Plug | Hex | TC-400-716MC-RA | 3190-1671 | 716M-RA |
| | | | | TC-400-716M-RA-D | 3190-2598 | DMR |
| BNC | Male | Straight Plug | Knurl | TC-400-BM-X | 3190-6232 | BM |
| | | Right Angle Plug | Knurl | TC-400-BM-RA-D | 3190-6430 | BMR |
| HN | Male | Straight Plug | Knurl | TC-400-HNM | 3190-923 | HNM |
| | | Right Angle Plug | Hex/Knurl | TC-400-HNM-RA | 3190-2541 | HNMR |
| Mini UHF | | Straight Plug | Knurl | TC-400-MUHF | 3190-520 | MUF |
| | | | | TC-400-NF-X | 3190-2815 | NF |
| N | Female | Straight Jack | N/A | TC-400-NF-BH-X | 3190-8219 | NFB |
| | | | Knurl | TC-400-NMC-2 | 3190-6077 | NM |
| | | | | TC-400-NM-RP | 3190-960 | NMRP |
| | Male | Straight Plug | Hex/Knurl | EZ-400-NMH-PL-X | 3190-2961 | NM |
| | | | | TC-400-NMH-PL-X | 3190-2962 | NM |
| | | | | TC-400-NMH-X | 3190-2626 | NM |
| | Right Angle Plug | Hex | TC-400-NMH-RA-SS | 3190-1668 | NMR | |
| | | Hex/Knurl | TC-400-NMH-RA-D | 3190-2293 | NMR | |
| QN | Male | Straight Plug | Knurl | TC-400-QNM-X | 3190-6212 | QNM |
| SMA | Male | Straight Plug | Solder | TC-400-SM-X | 3190-3046 | SM |
| | Female | Straight Jack | N/A | TC-400-SF-X | 3190-6174 | SF |
| TNC | Female | Straight Jack | N/A | EZ-400-TF-PL-X | 3190-6377 | TF |
| | | | | TC-400-TF-X | 3190-3051 | TF |
| | | | | TC-400-TF-RP | 3190-1063 | TFRP |
| | Male | Straight Plug | Knurl | TC-400-TM-RP | 3190-1062 | TMRP |
| | | | Hex/Knurl | EZ-400-TM-PL-X | 3190-6378 | TM |
| | | | | TC-400-TM-X | 3190-2532 | TM |
| | Right Angle Plug | Hex/Knurl | TC-400-TM-RA-D | 3190-2671 | TMR | |
| | | | TC-400-TM-RP-RA-D | 3190-6147 | TMRP | |

*Connector part numbers in bold text are the default connectors for LMR-400-LLPX cable assemblies

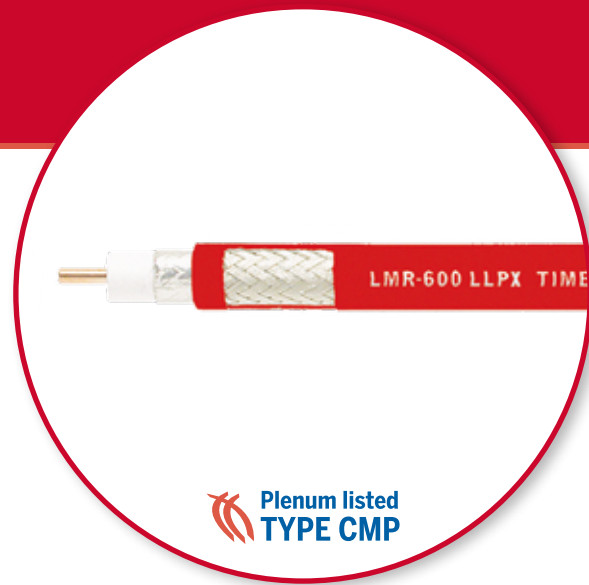
Specifications

Impedance 50 Ohms

Op Temp -40 to +257°F
-40 to +125°C

Units

| | | |
|---------------------------|-------------------|---------------|
| Diameter | in (mm) | 0.565 (14.38) |
| Weight | lb/ft (kg/m) | 0.21 (0.31) |
| Bend Radius: Installation | in (mm) | 2.8 (69.9) |
| Bend Radius: Repeated | in (mm) | 6.0 (152.4) |
| Bending Moment | ft-lb (N-m) | 2.75 (3.73) |
| Tensile Strength | lb (kg) | 265 (120.3) |
| Flat Plate Crush | lb/in. (kg/mm) | 210 (3.75) |
| Maximum Frequency | GHz | 8 |
| Velocity of Propagation | % | 76 |
| Dielectric Constant | NA | 1.73 |
| Time Delay | nS/ft (nS/m) | 1.34 (4.40) |
| Capacitance | pF/ft (pF/m) | 26.7 (87.6) |
| Inductance | uH/ft (uH/m) | 0.067 (0.22) |
| Shielding Effectiveness | dB | >90 |
| Inner Conductor | Ohms/1000ft (/km) | 0.73 (2.4) |
| Outer Conductor | Ohms/1000ft (/km) | 1.20 (3.90) |
| Voltage Withstand | Volts DC | 4000 |
| Jacket Spark | Volts RMS | 8000 |
| Peak Power | kW | 40 |



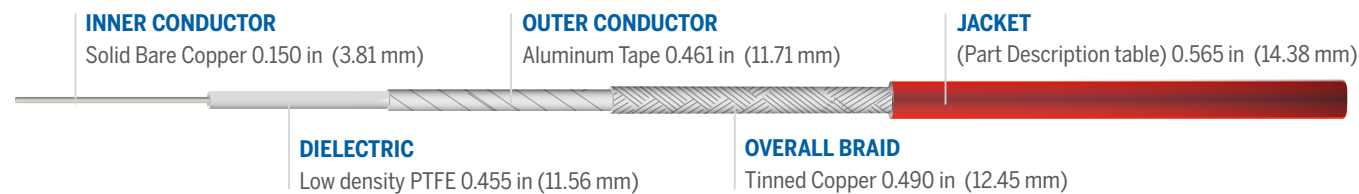
Calculation

$$IL = (K1 \times V(f) + K2 \times f) \times \text{Cable Length}$$

Cable Insertion Loss
f = Frequency (MHz)

Use K values with
matching length unit

| K values | dB/100ft | dB/100m |
|----------|----------|------------|
| K1 | 0.08139 | 0.26704059 |
| K2 | 0.00015 | 0.00049215 |



Part Description

| Part-Number | Application | Jacket | Color | Stock Code | Cable Code |
|--------------|----------------|--------------------|-------|------------|------------|
| LMR-600-LLPX | Indoor/Outdoor | PVDF Fluoropolymer | Red | 54461 | LPX600 |

Assembly Ordering Guide



*Refer to the Part Description table to select your desired Cable Code **Refer to the Connector table on page 39 to select your desired connector

Connectors

| Connectors | Gender | Description | Coupling Nut | Part Number | Stock Code | Connector Code |
|------------|------------------|------------------|------------------------|-------------------------|------------|----------------|
| 4.3/10 | Male | Straight Plug | Hex | TC-600-4310M-X | 3190-6273 | 43M |
| | Female | Straight Jack | N/A | TC-600-716FC | 3190-375 | DF |
| 7/16 DIN | Male | Straight Plug | Hex | TC-600-716M-X | 3190-2642 | DM |
| | | Right Angle Plug | Hex | TC-600-716M-RA-D | 3190-6211 | DMR |
| BNC | Male | Right Angle Plug | Knurl | TC-600-BM-RA-D | 3190-2734 | BMR |
| HN | Male | Straight Plug | Knurl | TC-600-HNMC | 3190-1429 | HNM |
| LC | Male | Straight Plug | Hex | TC-600-LCM | 3190-1406 | LCM |
| | | | Hex/Knurl | TC-600-LCM-PL | 3190-1221 | LCM |
| N | Female | Stright Jack | N/A | TC-600-NF-X | 3190-2816 | NF |
| | | | | TC-600-NF-BH | 3190-589 | NFB |
| | | | | TC-600-NF-PL | 3190-965 | NF |
| | Male | Straight Plug | Hex/Knurl | EZ-600-NMH-PL-X | 3190-2963 | NM |
| | | | | TC-600-NMC-2-D | 3190-6122 | NM |
| Male | Right Angle Plug | Hex/Knurl | TC-600-NMH-X | 3190-2628 | NM | |
| | | | TC-600-NMH-PL-X | 3190-2964 | NM | |
| TNC | Female | Straight Jack | N/A | TC-600-TF-X | 3190-3052 | TF |
| | | | Knurl | TC-600-TF-RP | 3190-1065 | TFRP |
| | Male | Straight Plug | Knurl | TC-600-TM-RP | 3190-1064 | TMRP |
| | | | Hex/Knurl | TC-600-TM-X | 3190-2530 | TM |
| Male | Right Angle Plug | Hex/Knurl | TC-600-TM-RA-D | 3190-2707 | TMR | |

*Connector part numbers in bold text are the default connectors for LMR-600-LLPX cable assemblies

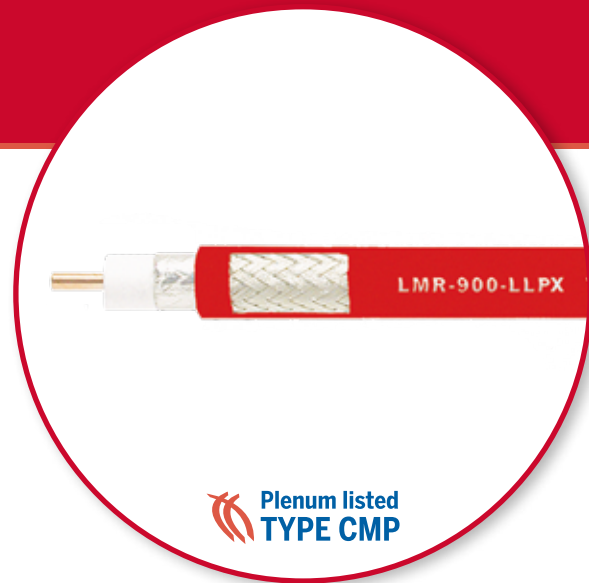
Specifications

Impedance 50 Ohms

Op Temp -40 to +257°F
-40 to +125°C

Units

| | | |
|---------------------------|-------------------|---------------|
| Diameter | in (mm) | 0.802 (20.37) |
| Weight | lb/ft (kg/m) | 0.54 (0.81) |
| Bend Radius: Installation | in (mm) | 3.00 (76.2) |
| Bend Radius: Repeated | in (mm) | 76.2 (228.6) |
| Bending Moment | ft-lb (N-m) | 9.0 (12.20) |
| Tensile Strength | lb (kg) | 660 (299.6) |
| Flat Plate Crush | lb/in. (kg/mm) | 300 (5.36) |
| Maximum Frequency | GHz | 6 |
| Velocity of Propagation | % | 76 |
| Dielectric Constant | NA | 1.73 |
| Time Delay | nS/ft (nS/m) | 1.34 (4.38) |
| Capacitance | pF/ft (pF/m) | 27.17 (89.1) |
| Inductance | uH/ft (uH/m) | 0.067 (0.22) |
| Shielding Effectiveness | dB | >90 |
| Inner Conductor | Ohms/1000ft (/km) | 0.63 (2.07) |
| Outer Conductor | Ohms/1000ft (/km) | 0.55 (1.8) |
| Voltage Withstand | Volts DC | 5000 |
| Jacket Spark | Volts RMS | 8000 |
| Peak Power | kW | 62 |



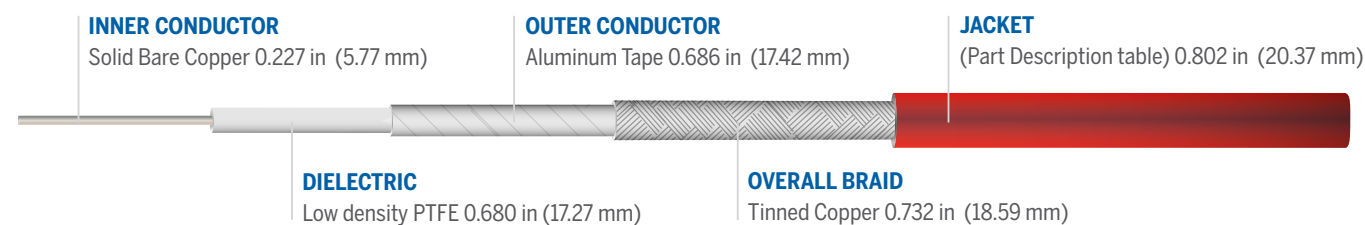
Calculation

$$IL = (K1 \times v(f) + K2 \times f) \times \text{Cable Length}$$

Cable Insertion Loss
f = Frequency (MHz)

Use K values with
matching length unit

| K values | dB/100ft | dB/100m |
|----------|----------|------------|
| K1 | 0.05722 | 0.18773882 |
| K2 | 0.00018 | 0.00059058 |



Part Description

| Part-Number | Application | Jacket | Color | Stock Code | Cable Code |
|--------------|----------------|--------------------|-------|------------|------------|
| LMR-900-LLPX | Indoor/Outdoor | PVDF Fluoropolymer | Red | 54462 | LPX900 |

Assembly Ordering Guide



*Refer to the Part Description table to select your desired Cable Code **Refer to the Connector table on page 41 to select your desired connector

Connectors

| Gender | Description | Coupling Nut | Part Number | Stock Code | Connector Code | |
|----------------|--------------------|------------------|-----------------------------|-----------------------------|----------------|-----|
| 7/8 EIA Flange | Straight Flange | N/A | EZ-900-78EIA-2-SP | 3190-6441 | 78EIA | |
| | Right Angle Flange | N/A | EZ-900-78EIA-RA-2-SP | 3190-6442 | 78EIA-RA | |
| 7/16 DIN | Female | Straight Jack | N/A | EZ-900-716FC-2-SP | 3190-6512 | DF |
| | Male | Straight Plug | Hex | EZ-900-716MC-2-SP | 3190-6452 | DM |
| | | Right Angle Plug | Hex | EZ-900-716MC-RA-2-SP | 3190-6423 | DMR |
| N | Female | Straight Jack | N/A | EZ-900-NFC-2-SP | 3190-6444 | NF |
| | Male | Straight Plug | Hex/Knurl | EZ-900-NMC-2-SP | 3190-6443 | NM |

*Connector part numbers in bold text are the default connectors for LMR-900-LLPX cable assemblies

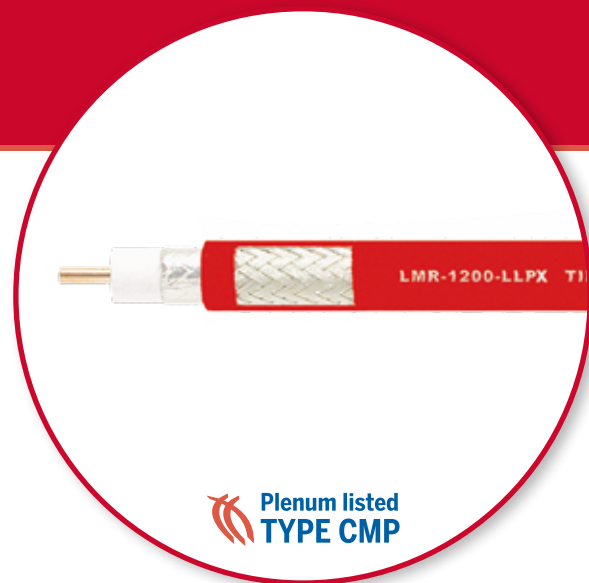
Specifications

Ω Impedance
50 Ohms

Op Temp
-40 to +257°F
-40 to +125°C

Units

| | | |
|---------------------------|-------------------|---------------|
| Diameter | in (mm) | 1.05 (26.7) |
| Weight | lb/ft (kg/m) | 0.7 (1.04) |
| Bend Radius: Installation | in (mm) | 6.0 (152.4) |
| Bend Radius: Repeated | in (mm) | 12.0 (304.8) |
| Bending Moment | ft-lb (N-m) | 15.0 (20.34) |
| Tensile Strength | lb (kg) | 975 (442.7) |
| Flat Plate Crush | lb/in. (kg/mm) | 375 (6.70) |
| Maximum Frequency | GHz | 6 |
| Velocity of Propagation | % | 76 |
| Dielectric Constant | NA | 1.73 |
| Time Delay | nS/ft (nS/m) | 1.34 (4.40) |
| Capacitance | pF/ft (pF/m) | 27.17 (89.12) |
| Inductance | uH/ft (uH/m) | 0.067 (0.22) |
| Shielding Effectiveness | dB | >90 |
| Inner Conductor | Ohms/1000ft (/km) | 0.37 (1.21) |
| Outer Conductor | Ohms/1000ft (/km) | 0.37 (1.21) |
| Voltage Withstand | Volts DC | 6000 |
| Jacket Spark | Volts RMS | 8000 |
| Peak Power | kW | 90 |



Plenum listed
TYPE CMP

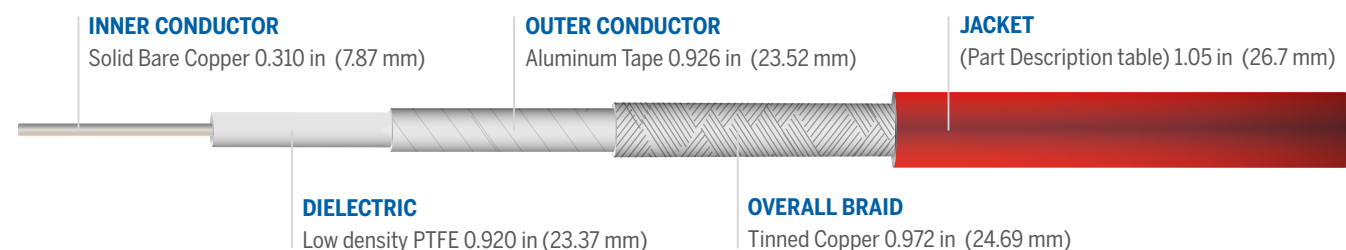
Calculation

$$IL = (K1 \times V(f) + K2 \times f) \times \text{Cable Length}$$

Cable Insertion Loss
f = Frequency (MHz)

Use K values with
matching length unit

| K values | dB/100ft | dB/100m |
|----------|----------|------------|
| K1 | 0.04172 | 0.13688332 |
| K2 | 0.00018 | 0.00059058 |



Part Description

| Part-Number | Application | Jacket | Color | Stock Code | Cable Code |
|---------------|----------------|--------------------|-------|------------|------------|
| LMR-1200-LLPX | Indoor/Outdoor | PVDF Fluoropolymer | Red | 54463 | LPX1200 |

Assembly Ordering Guide

XXXXXXX Cable Code
 -XXX Connector A
 XXX- Connector B
 XX.X Length
 X Units of measure: I = Inches, F = Feet, M = Meters

*Refer to the Part Description table to select your desired Cable Code **Refer to the Connector table on page 43 to select your desired connector

Connectors

| | Gender | Description | Coupling Nut | Part Number | Stock Code | Connector Code |
|---|--------|---------------|--------------|-------------------------|------------|----------------|
| N | Female | Straight Jack | N/A | EZ-1200-NFC-PL-2 | 3190-6370 | NF |
| | Male | Straight plug | Hex/Knurl | EZ-1200-NMC-PL-2 | 3190-6021 | NM |

*Connector part numbers in bold text are the default connectors for LMR-1200-LLPX cable assemblies

195

| Installation Tools | Description | Part Number | Stock Code |
|------------------------|---|---------------------|------------|
| Combination Strip Tool | Prep Tool for LMR-195 and 200 | CST-195/200 | 3192-102 |
| Crimp Tool | Crimp tool for LMR-195,200 and 240 | CT-240/200/195/100 | 3192-256 |
| Universal Crimp Tool | Universal, heavy-duty crimp handle | CT-U | 3192-181 |
| Crimp Dies | LMR-195 crimp dies (0.213" hex) for use with the CT-U | Y197 | 3190-610 |
| Cutting Tool | Spring loaded LMR cutting tool | CCT-03 | 3192-267 |
| Debur Tool | Center conductor debur tool | DBT-U | 3192-001 |
| Replacement Blade Kit | Replacement blade for all CST prepping tools | RB-CST | 3192-086 |
| | Replacement blade for the CCT-03 cutting tool | RB-03 | 3192-337 |
| Tool Pouch | Embroided tool pouch with zipper | FKP-01 | 3190-584 |
| Hardcase Tool Kit | Connector Attachment Tools for LMR-195, 200 and 240 | TK-195/200/240EZ-HC | 660-1206 |
| Hardware | Description | Part Number | Stock Code |
| Weather Seal Boot | Weather Seal strain relief boot (10 pack) | WSB-195/200 | 3109-445 |
| Silicone Tape | Self-bonding silicone tape (for six connections) | WK-S-1 | WK-S-1 |
| Cold Shrink | Cold Shrink for LMR-200 to LMR-600 | CS-2060T | CS-2060T |

240

| Installation Tools | Description | Part Number | Stock Code |
|------------------------|---|--------------------|------------|
| Combination Strip Tool | Prep Tool for LMR-240-LLPX | CST-240-PX | 3192-263 |
| Crimp Tool | Crimp tool for LMR-195,200 and 240 | CT-240/200/195/100 | 3192-256 |
| Universal Crimp Tool | Universal, heavy-duty crimp handle | CT-U | 3192-181 |
| Crimp Dies | LMR-240 crimp dies (0.255" hex) for use with the CT-U | Y375 | 3190-608 |
| Cutting Tool | Spring loaded LMR cutting tool | CCT-03 | 3192-267 |
| Debur Tool | Center conductor debur tool | DBT-U | 3192-001 |
| Replacement Blade Kit | Replacement blade for all CST prepping tools | RB-CST | 3192-086 |
| | Replacement blade for the CCT-03 cutting tool | RB-03 | 3192-337 |
| Tool Pouch | Embroided tool pouch with zipper | FKP-01 | 3190-584 |
| Hardware | Description | Part Number | Stock Code |
| Weather Seal Boot | Weather Seal strain relief boot (10 pack) | WSB-240 | 3109-400 |
| Silicone Tape | Self-bonding silicone tape (for six connections) | WK-S-1 | WK-S-1 |
| Cold Shrink | Cold Shrink for LMR-200 to LMR-600 | CS-2060T | CS-2060T |

400

| Installation Tools | Description | Part Number | Stock Code |
|------------------------|--|-------------|------------|
| Combination Strip Tool | Prep Tool for LMR-400-PX | CST-400-PX | 3192-264 |
| Crimp Tool | Crimp tool for LMR-400 | CT-400/300 | 3190-666 |
| Universal Crimp Tool | Universal, heavy-duty crimp handle | CT-U | 3192-181 |
| Crimp Dies | LMR-400 crimp dies (0.429" hex) for use with the CT-U | Y1719 | 3190-202 |
| Cutting Tool | Spring loaded LMR cutting tool | CCT-03 | 3192-267 |
| Replacement Blade Kit | Replacement blade for all CST prepping tools | RB-CST | 3192-086 |
| | Replacement blade for the CCT-03 cutting tool | RB-03 | 3192-337 |
| Tool Pouch | Embroided tool pouch with zipper | FKP-01 | 3190-584 |
| Hardware | Description | Part Number | Stock Code |
| Weather Seal Boot | Weather Seal strain relief boot (10 pack) | WSB-400 | 3109-394 |
| | Over connector weather protection for LMR-400 and N male | WPB-400-NM | 3192-6122 |
| Silicone Tape | Self-bonding silicone tape (for six connections) | WK-S-1 | WK-S-1 |
| Weather Seal Kit | Universal weather proofing kit (for six connections) | WK-U | WK-U |
| Cold Shrink | Cold Shrink for LMR-200 to LMR-600 | CS-2060T | CS-2060T |
| | Cold Shrink for LMR-400 to LMR-600 | CS-4060T | CS-4060T |

600

| Installation Tools | Description | Part Number | Stock Code |
|------------------------|--|-------------|------------|
| Combination Strip Tool | Prep Tool for LMR-600-PX | CST-600-PX | 3192-265 |
| Crimp Tool | Crimp tool for LMR-600 | CT-600 | 3192-170 |
| Universal Crimp Tool | Universal, heavy-duty crimp handle | CT-U | 3192-181 |
| Crimp Dies | LMR-600 crimp dies (0.610" hex) for use with the CT-U | Y1720 | 3190-203 |
| Cutting Tool | LMR cutting tool | CCT-02 | 3192-165 |
| Replacement Blade Kit | Replacement blade for all CST prepping tools | RB-CST | 3192-086 |
| | Replacement blade for the CCT-02 cutting tool | RB-02 | 3192-166 |
| Tool Pouch | Embroided tool pouch with zipper | FKP-01 | 3190-584 |
| Hardware | Description | Part Number | Stock Code |
| Weather Seal Boot | Weather Seal strain relief boot (10 pack) | WSB-600 | 3109-401 |
| | Over connector weather protection for LMR-600 and N male | WPB-600-NM | 3192-6163 |
| Silicone Tape | Self-bonding silicone tape (for six connections) | WK-S-1 | WK-S-1 |
| Weather Seal Kit | Universal weather proofing kit (for six connections) | WK-U | WK-U |
| Cold Shrink | Cold Shrink for LMR-200 to LMR-600 | CS-2060T | CS-2060T |
| | Cold Shrink for LMR-400 to LMR-600 | CS-4060T | CS-4060T |

900

| Installation Tools | Description | Part Number | Stock Code |
|-----------------------|--|-------------|------------|
| Cutting Tool | LMR cutting tool | CCT-02 | 3192-165 |
| Wrench | 1 1/4" open end wrench (2 required) | WR-900 | 3190-509 |
| Replacement Blade Kit | Replacement blade for the CCT-02 cutting tool | RB-02 | 3192-166 |
| Tool Pouch | Embroided tool pouch with zipper | FKP-01 | 3190-584 |
| Hardware | Description | Part Number | Stock Code |
| Silicone Tape | Self-bonding silicone tape (for six connections) | WK-S-1 | WK-S-1 |
| Weather Seal Kit | Universal weather proofing kit (for six connections) | WK-U | WK-U |
| Cold Shrink | Cold Shrink for LMR-600 to LMR-1200 | CS-60120T | CS-60120T |

1200

| Installation Tools | Description | Part Number | Stock Code |
|-----------------------|--|-------------|------------|
| Cutting Tool | LMR cutting tool | CCT-02 | 3192-165 |
| Wrench | 1 9/16" open end wrench (1 required) | WR-1200A | 3192-385 |
| | 1 7/16" open end wrench (1 required) | WR-1200B | 3190-511 |
| Replacement Blade Kit | Replacement blade for the CCT-02 cutting tool | RB-02 | 3192-166 |
| Tool Pouch | Embroided tool pouch with zipper | FKP-01 | 3190-584 |
| Hardware | Description | Part Number | Stock Code |
| Silicone Tape | Self-bonding silicone tape (for six connections) | WK-S-1 | WK-S-1 |
| Weather Seal Kit | Universal weather proofing kit (for six connections) | WK-U | WK-U |
| Cold Shrink | Cold Shrink for LMR-600 to LMR-1200 | CS-60120T | CS-60120T |

Specifications

Ω Impedance
75 Ohms

Op Temp
-40 to +185°F
-40 to +85°C

Units

| | | |
|---------------------------|-------------------|--------------|
| Diameter | in (mm) | 0.240 (6.10) |
| Weight | lb/ft (kg/m) | 0.034 (0.05) |
| Bend Radius: Installation | in (mm) | 0.75 (19.1) |
| Bend Radius: Repeated | in (mm) | 2.5 (63.5) |
| Bending Moment | ft-lb (N-m) | 0.25 (0.34) |
| Tensile Strength | lb (kg) | 80 (38.3) |
| Flat Plate Crush | lb/in. (kg/mm) | 20 (0.36) |
| Maximum Frequency | GHz | 6 |
| Velocity of Propagation | % | 84 |
| Dielectric Constant | NA | 1.42 |
| Time Delay | nS/ft (nS/m) | 1.21 (3.97) |
| Capacitance | pF/ft (pF/m) | 16.1 (52.9) |
| Inductance | uH/ft (uH/m) | 0.091 (0.30) |
| Shielding Effectiveness | dB | >90 |
| Inner Conductor | Ohms/1000ft (/km) | 10.1 (33.1) |
| Outer Conductor | Ohms/1000ft (/km) | 3.89 (12.8) |
| Voltage Withstand | Volts DC | 1500 |
| Jacket Spark | Volts RMS | 5000 |
| Peak Power | kW | 5.6 |



Calculation

$$IL = (K1 \times v(f) + K2 \times f) \times \text{Cable Length}$$

Cable Insertion Loss
f = Frequency (MHz)

Use K values with
matching length unit

| K values | dB/100ft | dB/100m |
|----------|----------|-------------|
| K1 | 0.269 | 0.882589 |
| K2 | 0.000305 | 0.001000705 |

Connectors

| Gender | Description | Coupling Nut | Part Number | Stock Code | Connector Code | |
|--------|-------------|---------------|-------------|------------------------|----------------|----|
| BNC | Male | Straight Plug | Knurl | EZ-240-BM-75-X | 3190-6261 | BM |
| | | | | TC-240-BM-75-X | 3190-2939 | BM |
| F | Male | Straight Plug | Hex | EZ-240-FMH-75-X | 3190-6411 | FM |
| | | | | TC-240-FMH-75 | 3190-1483 | FM |
| N | Male | Straight Plug | Hex/Knurl | EZ-240-NMH-75-X | 3190-6284 | QF |

*Connector part numbers in bold text are the default connectors for LMR-240 75 ohm cable assemblies

INNER CONDUCTOR

Solid Bare Copper 0.032 in (0.82 mm)

OUTER CONDUCTOR

Aluminum Tape 0.155 in (3.94 mm)

JACKET

(Part Description table) 0.240 in (6.10 mm)

DIELECTRIC

Foam PE 0.150 in (3.81 mm)

OVERALL BRAID

Tinned Copper 0.178 in (4.52 mm)

Part Description

| Part-Number | Application | Jacket | Color | Stock Code | Cable Code |
|---------------|--------------------------|--------|-------|------------|------------|
| LMR-240-75 | Indoor/Outdoor | PE | Black | 54150 | L750240 |
| LMR-240-75-FR | Indoor/Outdoor Riser CMR | FRPE | Black | 54259 | L75F240 |
| LMR-240-75-DB | Outdoor | PE | Black | 54226 | L75D240 |

* LMR-FR is a low-smoke, zero-halogen cable. See page 54 for performance details

Assembly Ordering Guide

XXXX
Cable Code

-XXX
Connector A

XXX-
Connector B

XX.X
Length

X
Units of measure: I = Inches, F = Feet, M = Meters

*Refer to the Part Description table to select your desired Cable Code **Refer to the Connector table on page 47 to select your desired connector

Specifications

Ω Impedance 75 Ohms

Op Temp -40 to +185°F
-40 to +85°C

Units

| | | |
|---------------------------|-------------------|---------------|
| Diameter | in (mm) | 0.405 (10.29) |
| Weight | lb/ft (kg/m) | 0.068 (0.10) |
| Bend Radius: Installation | in (mm) | 1.00 (25.4) |
| Bend Radius: Repeated | in (mm) | 4.0 (101.6) |
| Bending Moment | ft-lb (N-m) | 0.5 (0.68) |
| Tensile Strength | lb (kg) | 160 (72.6) |
| Flat Plate Crush | lb/in. (kg/mm) | 40 (0.71) |
| Maximum Frequency | GHz | 6 |
| Velocity of Propagation | % | 85 |
| Dielectric Constant | NA | 1.38 |
| Time Delay | nS/ft (nS/m) | 1.20 (3.92) |
| Capacitance | pF/ft (pF/m) | 15.9 (52.3) |
| Inductance | uH/ft (uH/m) | 0.090 (0.29) |
| Shielding Effectiveness | dB | >90 |
| Inner Conductor | Ohms/1000ft (/km) | 2.5 (8.20) |
| Outer Conductor | Ohms/1000ft (/km) | 1.65 (5.4) |
| Voltage Withstand | Volts DC | 2000 |
| Jacket Spark | Volts RMS | 5000 |
| Peak Power | kW | 10 |



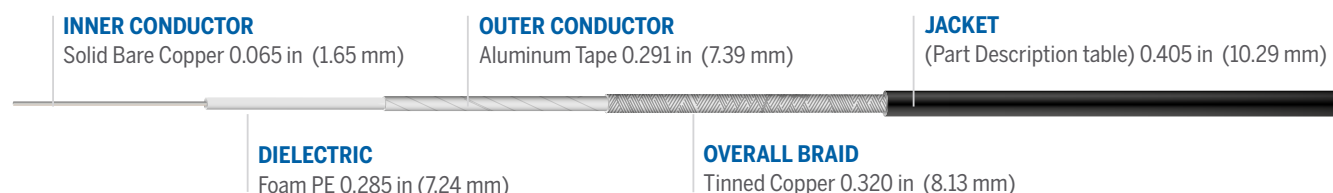
Calculation

$$IL = (K1 \times v(f) + K2 \times f) \times \text{Cable Length}$$

Cable Insertion Loss
f = Frequency (MHz)

Use K values with
matching length unit

| K values | dB/100ft | dB/100m |
|----------|----------|------------|
| K1 | 0.11557 | 0.37918517 |
| K2 | 0.00026 | 0.00085306 |



Part Description

| Part-Number | Application | Jacket | Color | Stock Code | Cable Code |
|---------------|--------------------------|--------|-------|------------|------------|
| LMR-400-75 | Indoor/Outdoor | PE | Black | 54147 | L750400 |
| LMR-400-75-FR | Indoor/Outdoor Riser CMR | FRPE | Black | 54256 | L75F400 |
| LMR-400-75-DB | Indoor/Outdoor | PE | Black | 54228 | L75D400 |

* LMR-FR is a low-smoke, zero-halogen cable. See page 54 for performance details

Assembly Ordering Guide

XXXX Cable Code
 -XXX Connector A
 XXX- Connector B
 XX.X Length
 X Units of measure: I = Inches, F = Feet, M = Meters

*Refer to the Part Description table to select your desired Cable Code **Refer to the Connector table on page 49 to select your desired connector

Connectors

| Gender | Description | Coupling Nut | Part Number | Stock Code | Connector Code | |
|--------|-------------|---------------|-------------|-----------------|----------------|----|
| BNC | Male | Straight Plug | Knurl | TC-400-BM-75-X | 3190-2960 | BM |
| F | Male | Straight Plug | Hex | EZ-400-FM-75-X | 3190-6482 | FM |
| N | Male | Straight Plug | Hex/Knurl | EZ-400-NMH-75-X | 3190-6408 | NM |
| | | | Knurl | TC-400-NM-75 | 3190-389 | NM |
| | | | | TC-400-NM-75-50 | 3190-1704 | NM |

*Connector part numbers in bold text are the default connectors for LMR-400 75 ohm cable assemblies

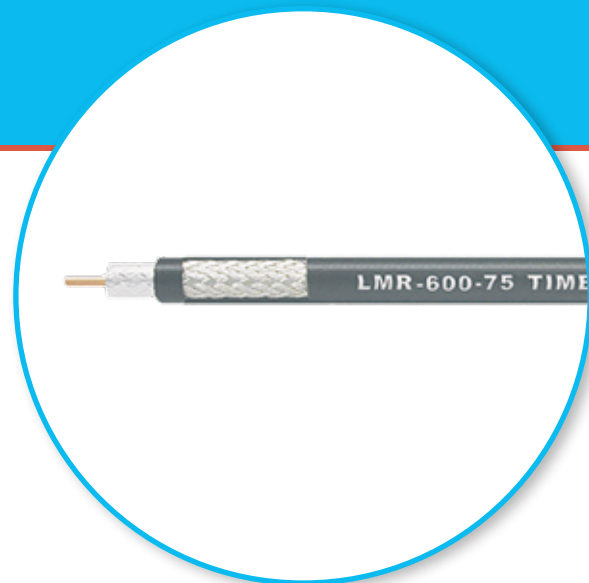
Specifications

Ω Impedance
75 Ohms

Op Temp
-40 to +185°F
-40 to +85°C

Units

| | | |
|---------------------------|-------------------|--------------|
| Diameter | in (mm) | 0.590 (15.0) |
| Weight | lb/ft (kg/m) | 0.131 (0.20) |
| Bend Radius: Installation | in (mm) | 1.5 (38.1) |
| Bend Radius: Repeated | in (mm) | 6.0 (152.4) |
| Bending Moment | ft-lb (N-m) | 2.75 (3.73) |
| Tensile Strength | lb (kg) | 350 (158.9) |
| Flat Plate Crush | lb/in. (kg/mm) | 60 (1.07) |
| Maximum Frequency | GHz | 6 |
| Velocity of Propagation | % | 87 |
| Dielectric Constant | NA | 1.32 |
| Time Delay | nS/ft (nS/m) | 1.17 (3.83) |
| Capacitance | pF/ft (pF/m) | 15.6 (51.1) |
| Inductance | uH/ft (uH/m) | 0.088 (0.29) |
| Shielding Effectiveness | dB | >90 |
| Inner Conductor | Ohms/1000ft (/km) | 1.39 (4.56) |
| Outer Conductor | Ohms/1000ft (/km) | 1.2 (3.9) |
| Voltage Withstand | Volts DC | 4000 |
| Jacket Spark | Volts RMS | 8000 |
| Peak Power | kW | 40 |



Calculation

$$IL = (K1 \times V(f) + K2 \times f) \times \text{Cable Length}$$

Cable Insertion Loss
f = Frequency (MHz)

Use K values with
matching length unit

| K values | dB/100ft | dB/100m |
|----------|----------|------------|
| K1 | 0.07059 | 0.23160579 |
| K2 | 0.00026 | 0.00085306 |



Part Description

| Part-Number | Application | Jacket | Color | Stock Code | Cable Code |
|---------------|--------------------------|--------|-------|------------|------------|
| LMR-600-75 | Indoor/Outdoor | PE | Black | 54148 | L750600 |
| LMR-600-75-DB | Outdoor/Watertight | PE | Black | 54220 | L75D600 |
| LMR-600-75-FR | Indoor/Outdoor Riser CMR | FRPE | Black | 54258 | L75F600 |

* LMR-FR is a low-smoke, zero-halogen cable. See page 54 for performance details

Assembly Ordering Guide

XXXX Cable Code
 -XXX Connector A
 XXX- Connector B
 XX.X Length
 X Units of measure: I = Inches, F = Feet, M = Meters

*Refer to the Part Description table to select your desired Cable Code **Refer to the Connector table on page 51 to select your desired connector

| Connectors | Gender | Description | Coupling Nut | Part Number | Stock Code | Connector Code |
|------------|--------|---------------|--------------|-------------------------|------------|----------------|
| F | Male | Straight Plug | Hex | EZ-600-FM-75-X | 3190-6410 | FM |
| N | Male | Straight Plug | Knurl | EZ-600-NM-75 | 3190-1620 | NM |
| | | | Hex | TC-600-NMH-75-50 | 3190-1610 | NM |

*Connector part numbers in bold text are the default connectors for LMR-600 75 ohm cable assemblies

240

| Installation Tools | Description | Part Number | Stock Code |
|------------------------|---|---------------------|------------|
| Combination Strip Tool | Prep Tool for LMR-240 | CST-240A | 3192-152 |
| Crimp Tool | Crimp tool for LMR-195,200 and 240 | CT-240/200/195/100 | 3192-256 |
| Universal Crimp Tool | Universal, heavy-duty crimp handle | CT-U | 3192-181 |
| Crimp Dies | LMR-240 crimp dies (0.255" hex) for use with the CT-U | Y375 | 3190-608 |
| Cutting Tool | Spring loaded LMR cutting tool | CCT-03 | 3192-267 |
| Debur Tool | Center conductor debur tool | DBT-U | 3192-001 |
| Replacement Blade Kit | Replacement blade for all CST prepping tools | RB-CST | 3192-086 |
| | Replacement blade for the CCT-03 cutting tool | RB-03 | 3192-337 |
| Tool Pouch | Embroided tool pouch with zipper | FKP-01 | 3190-584 |
| Hardcase Tool Kit | Connector Attachment Tools for LMR-195, 200 and 240 | TK-195/200/240EZ-HC | 660-1206 |
| Hardware | Description | Part Number | Stock Code |
| Weather Seal Boot | Weather Seal strain relief boot (10 pack) | WSB-240 | 3109-400 |
| Silicone Tape | Self-bonding silicone tape (for six connections) | WK-S-1 | WK-S-1 |
| Cold Shrink | Cold Shrink for LMR-200 to LMR-600 | CS-2060T | CS-2060T |
| Ground Kit | Standard ground kit for LMR-240 | GK-S240TT | GK-S240TT |

400

| Installation Tools | Description | Part Number | Stock Code |
|------------------------|--|--------------------|------------|
| Combination Strip Tool | Prep Tool for LMR-400-75 | CST-400-75 | 3192-089 |
| Crimp Tool | Crimp tool for LMR-400 | CT-400/300 | 3190-666 |
| Universal Crimp Tool | Universal, heavy-duty crimp handle | CT-U | 3192-181 |
| Crimp Dies | LMR-400 crimp dies (0.429" hex) for use with the CT-U | Y1719 | 3190-202 |
| Cutting Tool | Spring loaded LMR cutting tool | CCT-03 | 3192-267 |
| Mid-Span Strip Tool | Prep Tool for Ground Strap Attachment | GST-400A | 3190-2174 |
| Replacement Blade Kit | Replacement blade for all CST prepping tools | RB-CST | 3192-086 |
| | Replacement blade for the CCT-03 cutting tool | RB-03 | 3192-337 |
| Tool Pouch | Embroided tool pouch with zipper | FKP-01 | 3190-584 |
| Hardcase Tool Kit | Connector Attachment Tools for LMR-400 and LMR-400-75 | TK-400/400-75EZ-HC | 660-1266 |
| Hardware | Description | Part Number | Stock Code |
| Weather Seal Boot | Weather Seal strain relief boot (10 pack) | WSB-400 | 3109-394 |
| | Over connector weather protection for LMR-400 and N male | WPB-400-NM | 3192-6122 |
| Silicone Tape | Self-bonding silicone tape (for six connections) | WK-S-1 | WK-S-1 |
| Weather Seal Kit | Universal weather proofing kit (for six connections) | WK-U | WK-U |
| Cold Shrink | Cold Shrink for LMR-200 to LMR-600 | CS-2060T | CS-2060T |
| | Cold Shrink for LMR-400 to LMR-600 | CS-4060T | CS-4060T |
| Ground Kit | Standard ground kit for LMR-400 | GK-S400TT | GK-S400TT |
| Pull Hoist | pre-laced pull hoist for LMR-400 | HG-400T | HG-400T |
| Hangers | Standard hanger for LMR-400 and LMR-600 | BH-S38-NH | BH-S38-NH |
| Support Blocks | Mini coax support blocks for LMR-400 | CB-400T | CB-400T |

600

| Installation Tools | Description | Part Number | Stock Code |
|-----------------------|--|-------------|------------|
| Strip Tool | Prep Tool for LMR-600-75 | ST-600-75 | 3192-090 |
| Crimp Tool | Crimp tool for LMR-600 | CT-600 | 3192-170 |
| Universal Crimp Tool | Universal, heavy-duty crimp handle | CT-U | 3192-181 |
| Crimp Dies | LMR-600 crimp dies (0.610" hex) for use with the CT-U | Y1720 | 3190-203 |
| Cutting Tool | LMR cutting tool | CCT-02 | 3192-165 |
| Mid-Span Strip Tool | Prep Tool for Ground Strap Attachment | GST-600A | 3190-1051 |
| Replacement Blade Kit | Replacement blade for all CST prepping tools | RB-CST | 3192-086 |
| | Replacement blade for the CCT-02 cutting tool | RB-02 | 3192-166 |
| Tool Pouch | Embroided tool pouch with zipper | FKP-01 | 3190-584 |
| Hardware | Description | Part Number | Stock Code |
| Weather Seal Boot | Weather Seal strain relief boot (10 pack) | WSB-600 | 3109-401 |
| | Over connector weather protection for LMR-600 and N male | WPB-600-NM | 3192-6163 |
| Silicone Tape | Self-bonding silicone tape (for six connections) | WK-S-1 | WK-S-1 |
| Weather Seal Kit | Universal weather proofing kit (for six connections) | WK-U | WK-U |
| Cold Shrink | Cold Shrink for LMR-200 to LMR-600 | CS-2060T | CS-2060T |
| | Cold Shrink for LMR-400 to LMR-600 | CS-4060T | CS-4060T |
| Ground Kit | Standard ground kit for LMR-600 | GK-S600TT | GK-S600TT |
| Pull Hoist | Lace-up pull hoist for LMR-600 | HG-600T | HG-600T |
| Hangers | Standard hanger for LMR-400 and LMR-600 | BH-S38-NH | BH-S38-NH |
| Support Blocks | Mini coax support blocks for LMR-600 | CB-600T | CB-600T |

References

LMR-FR (Low-Smoke, Zero Halogen):

UL/CSA listed, Type CMR (Riser Rated)
under UL File #E-170516.

CPR-Construction Product Regulation:

- LMR-195FR/240FR
 - Rated Cca, s2, d0, a1
 - DoP certificate #1005 is available on www.timesmicrowave.com
(Reference Times DoP #1005)
- LMR-400FR/600FR/LMR-900FR/LMR-1200FR
 - Rated B2ca, s1a, d0, a1
 - DoP #1006 certificate available on www.timesmicrowave.com

Rail Industry Certification:

Compliant to EN-45545 (R15/R16), NFPA-130
and BS-6853 Rail Standards

Flame Performance:

Meets UL-1666, UL-1581, UL-VW1, IEC332-1-2, IEC332-3, IEEE-383 and BS-4066 Flame Standards

Smoke Generation:

Meets IEC-61034-2 and NES-711 smoke generation requirements

Halogen Content:

Zero-Halogen meeting IEC-754-1 and -2, BS6425-1 and BS-6425-2 standards

LMR-LSZH (Low-Smoke, Zero-Halogen):

Non UL/CSA Listed cable design

CPR-Construction Product Regulation::

- LMR-195-LSZH through LMR-1200-LSZH
 - Rated "Dca" (Reference Times DoP#1008)

*Flame, Smoke, Halogen information available upon request

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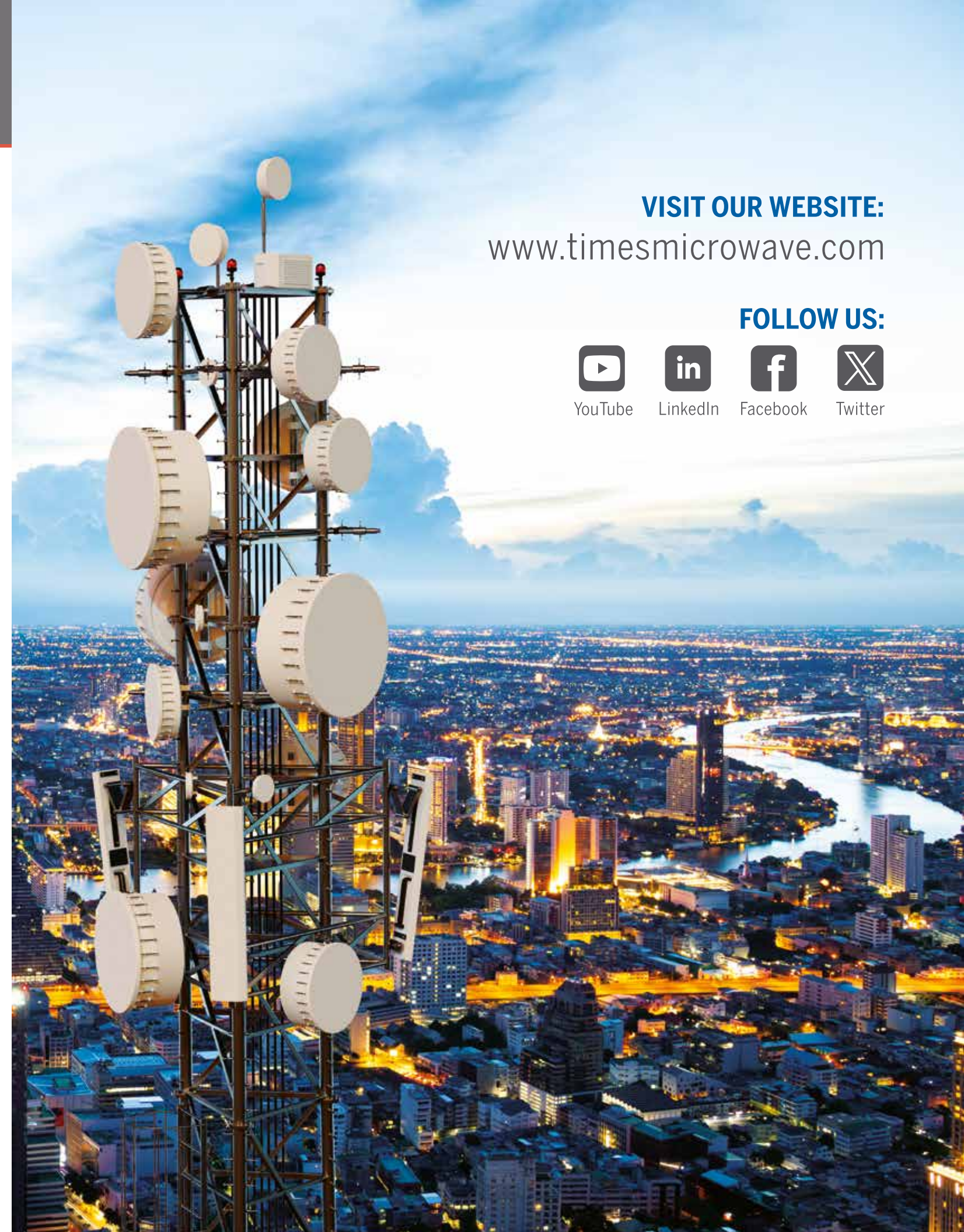
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Times Microwave Systems
358 Hall Avenue
Wallingford, CT 06492, USA
T 800. 867.2629



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