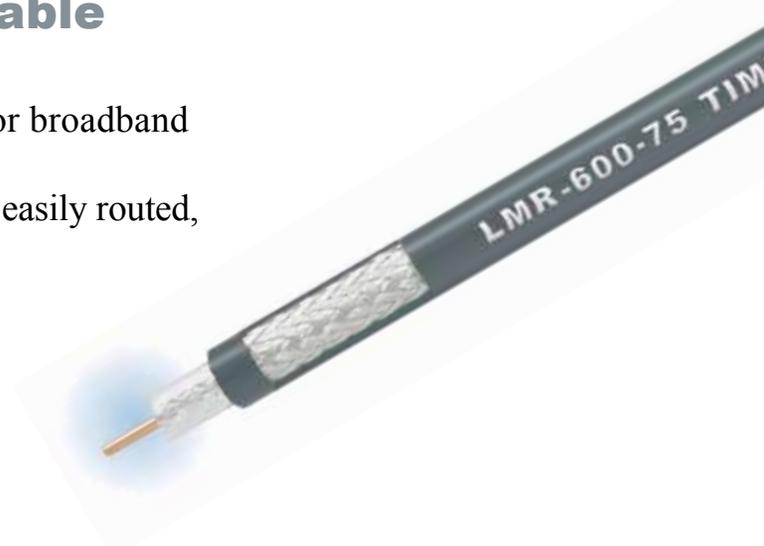


LMR[®]-600-75 Ohm Flexible Low Loss Coaxial Cable

Ideal for...

- Video Applications-CCTV, CATV, baseband or broadband
- In-Building Feeder Runs
- Any 75 ohm Wireless Application requiring an easily routed, low loss RF cable



• **LMR[®]-75** standard is a UV Resistant Polyethylene jacketed cable designed for 20-year service outdoor use. The bending and handling characteristics are significantly better than any smooth wall or corrugated hard-line cables.

• **Flexibility** and bendability are hallmarks of the LMR-600-75 cable design. The flexible outer conductor enables the tightest bend radius available for any cable of similar size and performance.

• **Low Loss** is another hallmark feature of LMR-600-75. Size for size LMR-75 has the lowest loss of any flexible cable and comparable loss to semirigid hard-line cables.

• **RF Shielding** is 50 dB greater than typical single shielded coax (40 dB). The multi-ply bonded foil outer conductor is rated conservatively at > 90 dB (i.e. >180 dB between two adjacent cables).

• **Weatherability:** LMR-600-75 cables designed for outdoor exposure incorporate the best materials for UV resistance and have life expectancy in excess of 20 years.

• **Connectors:** Standard available connectors include type-N and type-F male plug with 75 ohm interface. Most LMR-75 connectors are the EZ install type with crimp outer and non-solder center contact attachment.

• **Cable Assemblies:** All LMR-600-75 cable types are available as pre-terminated cable assemblies. Refer to the section on FlexTech for further details.

| Part Description | | | | |
|------------------|----------------|--------|-------|------------|
| Part Number | Application | Jacket | Color | Stock Code |
| LMR-600-75 | Indoor/Outdoor | PE | Black | 54148 |
| LMR-600-75-DB | Outdoor | PE | Black | 54220 |

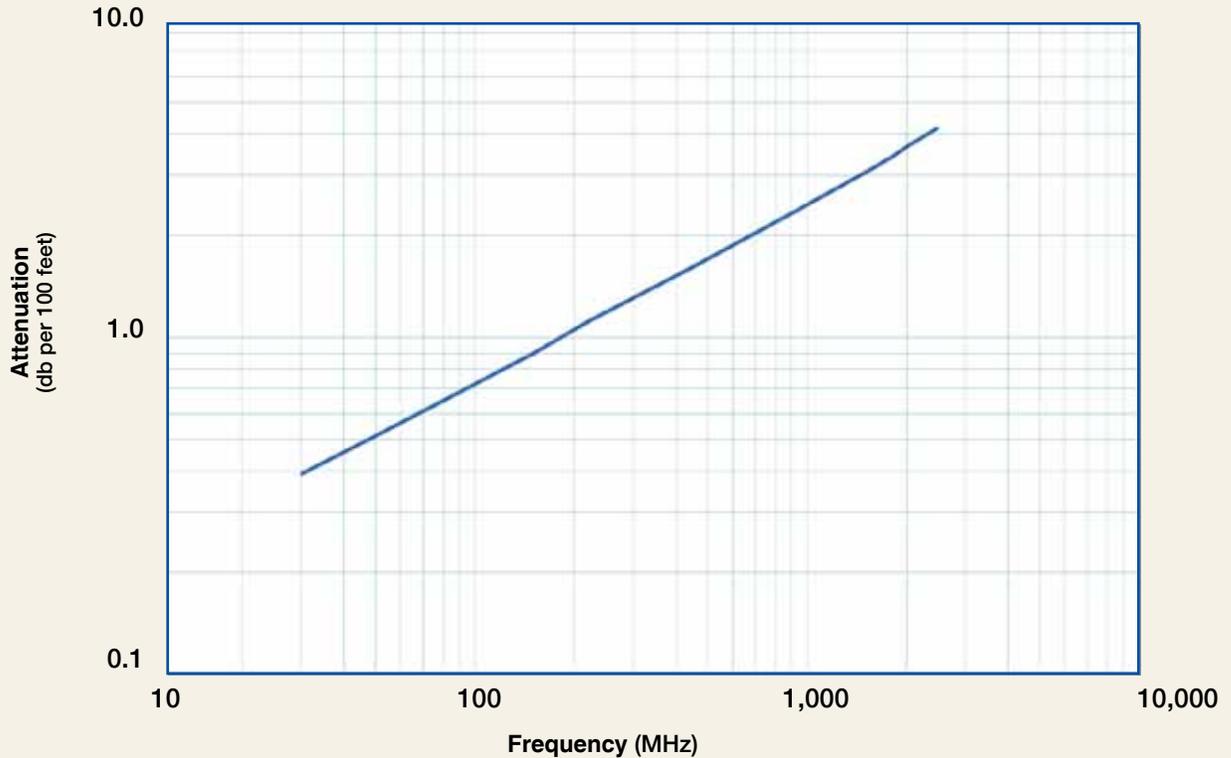
| Construction Specifications | | | |
|-----------------------------|---------------|-------|---------|
| Description | Material | In. | (mm) |
| Inner Conductor | Solid BCCAI | 0.108 | (2.74) |
| Dielectric | Foam PE | 0.455 | (11.56) |
| Outer Conductor | Aluminum Tape | 0.461 | (11.71) |
| Overall Braid | Tinned Copper | 0.490 | (12.45) |
| Jacket | Black PE | 0.590 | (14.99) |

| Mechanical Specifications | | | |
|---------------------------|----------------|-------|----------|
| Performance Property | Units | US | (metric) |
| 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) |
| Weight | lb/ft (kg/m) | 0.131 | (0.20) |
| Tensile Strength | lb (kg) | 350 | (158.9) |
| Flat Plate Crush | lb/in. (kg/mm) | 60 | (1.07) |

| Environmental Specifications | | |
|--------------------------------|----------|---------|
| Performance Property | °F | °C |
| Installation Temperature Range | -40/+185 | -40/+85 |
| Storage Temperature Range | -94/+185 | -70/+85 |
| Operating Temperature Range | -40/+185 | -40/+85 |

| Electrical Specifications | | | |
|---------------------------|-------------------|-------|----------|
| Performance Property | Units | US | (metric) |
| Max Operating Frequency | GHz | 2.5 | |
| Velocity of Propagation | % | 87 | |
| Dielectric Constant | NA | 1.32 | |
| Time Delay | nS/ft (nS/m) | 1.17 | (3.83) |
| Impedance | ohms | 75 | |
| Capacitance | pF/ft (pF/m) | 15.6 | (51.1) |
| Inductance | uH/ft (uH/m) | 0.088 | (0.29) |
| Shielding Effectiveness | dB | >90 | |
| DC Resistance | | | |
| 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 | |

Attenuation vs. Frequency (typical)



| Frequency (MHz) | 30 | 50 | 150 | 220 | 450 | 900 | 1500 | 1800 | 2000 | 2500 |
|------------------------------|------|------|------|------|------|------|------|------|------|------|
| Attenuation dB/100 ft | 0.4 | 0.5 | 0.9 | 1.1 | 1.6 | 2.3 | 3.1 | 3.5 | 3.7 | 4.2 |
| Attenuation dB/100 m | 1.3 | 1.7 | 3.0 | 3.6 | 5.3 | 7.7 | 10.2 | 11.4 | 12.1 | 13.7 |
| Avg. Power kW | 4.77 | 3.67 | 2.08 | 1.70 | 1.16 | 0.80 | 0.60 | 0.54 | 0.51 | 0.45 |

Calculate Attenuation =

$(0.070590) \cdot \sqrt{\text{FMHz}} + (0.000260) \cdot \text{FMHz}$ (interactive calculator available at http://www.timesmicrowave.com/cable_calculators)

Attenuation:

VSWR=1.0 ; Ambient = +25°C (77°F)

Power:

VSWR=1.0; Ambient = +40°C; Inner Conductor = 100°C (212°F); Sea Level; dry air; atmospheric pressure; no solar loading

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Connectors

| Interface | Description | Part Number | Stock Code | VSWR** Freq. (GHz) | Coupling Nut | Inner Contact Attach | Outer Contact Attach | Finish* Body /Pin | Length in (mm) | Width in (mm) | Weight lb (g) |
|-----------|---------------|---------------------|------------|--------------------|--------------|----------------------|----------------------|-------------------|----------------|---------------|---------------|
| F Male | Straight Plug | EZ-600-FMH-75 | 3190-1619 | <1.25:1 (2.5) | Hex | Spring Finger Crimp | | N/G | 1.7 (43.2) | 0.56(14.2) | 0.112 (50.8) |
| N Male | Straight Plug | EZ-600-NM-75 | 3190-1620 | <1.25:1 (2.0) | Knurl | Spring Finger Crimp | | N/G | 2.1 (53.1) | 0.87(22.1) | 0.166 (75) |
| | Straight Plug | TC-600-NMH-75/50*** | 3190-1610 | <1.25:1 (2.0) | Hex | Solder | Crimp | N/G | 2.1 (53.1) | 0.83(21.1) | 0.166 (75) |

* Finish metals: N=Nickel, S=Silver, G=Gold, SS=Stainless Steel, A=Alballyoy **VSWR spec based on 3 foot cable with a connector pair
 ***NOTE: 75/50 suffix indicates the connector is for installation on 75 ohm LMR cable and mates with 50 ohm type-N connectors



Install Tools

| Type | Part Number | Stock Code | Description |
|--------------------|-------------|------------|---|
| Crimp Tool | HX-4 | 3190-200 | Crimp Handle |
| Crimp Dies | Y1720 | 3190-203 | .610" Hex Dies |
| Crimp Rings | CR-600 | 3190-831 | Crimp Rings for TC/EZ-600 connectors (pkg of 10) |
| Strip Tool | ST-600-75 | 3192-085 | Strip tool for LMR-600-75 crimp and clamp style |
| Deburr Tool | DBT-U | 3192-001 | Removes center conductor rough edges |
| Midspan Strip Tool | GST-600A | 3190-1051 | For ground strap attachment |
| Cutting Tool | CCT-01 | 3190-1544 | Cable end flush cut tool |
| Replacement Blade | RB-01 | 3190-1609 | Replacement blade for cutting tool |
| Replacement Blade | RB-CST | 3192-086 | Replacement blade for all CST strip tools |
| Tool Kit | TK-600EZ | 660-0085 | Tool kit for LMR-600 Crimp Connectors (includes CCT-01, ST-600-75, HX-4, Y1720, Tool Pouch) |



Hardware Accessories

| Type | Part Number | Stock Code | Description |
|----------------------------------|-------------|------------|--|
| Ground Kit | GK-S600TT | GK-S600TT | Standard Grounding Kit (each) |
| Hoisting Grip | HG-600T | HG-600T | Split/Laced Type (each) |
| Cold Shrink | CS-A600T | CS-A600T | Cable to Antenna Junction (each) |
| Cold Shrink | CS-60120T | CS-60120T | LMR-600 to -1200 Junction (each) |
| Cold Shrink | CS-60170T | CS-60170T | LMR-600 to -1700 Junction (each) |
| Stand. Entry Port Cushion | SC-600T-3 | SC-600T-3 | Three Cables (each) |
| Standard Entry Panels | | | Full Range of Port Styles/Combinations Available |
| Hanger Blocks | CB-600T | CB-600T | Dual Cable Support Block (kit of 10) |
| Hanger Block Supporting Hardware | | | Complete Range of Supporting Hardware & Adapters Available |
| Snap-In Hangers | SH-U600T | SH-U600T | Snap-In Hangers (Kit of 10) |