

LMR®-600-LLPX Flexible Low Loss Plenum Coax

Ideal for...

- Indoor/Outdoor Plenum Feeder runs
- UL/NEC/CSA rated CMP/FT6 (listed under UL file #E-170516)
- Any wireless application (e.g. LMDS, MMDS, WLL, GPS, LMR, WLAN, WISP, WiMax, SCADA, Cellular, PCS, Paging) requiring an easily routed, low loss RF cable for in-building systems



Part Description

| Part Number | Application | Jacket | Color | Stock Code |
|--------------|------------------------|----------------------|-------|------------|
| LMR-600-LLPX | Indoor/Outdoor CMP/FT6 | Plenum Fluoropolymer | Red | 54461 |

Environmental Specifications

| Performance Property | °F | °C |
|--------------------------------|----------|----------|
| Installation Temperature Range | -40/+257 | -40/+125 |
| Storage Temperature Range | -40/+257 | -40/+125 |
| Operating Temperature Range | -40/+257 | -40/+125 |

Construction Specifications

| Description | Material | In. | (mm) |
|-----------------|-------------------|-------|---------|
| Inner Conductor | Solid BCCAI | 0.150 | (3.81) |
| Dielectric | Low density PTFE | 0.455 | (11.56) |
| Outer Conductor | Aluminum Tape | 0.461 | (11.71) |
| Overall Braid | Tinned Copper | 0.490 | (12.45) |
| Jacket | Red Fluoropolymer | 0.565 | (14.38) |

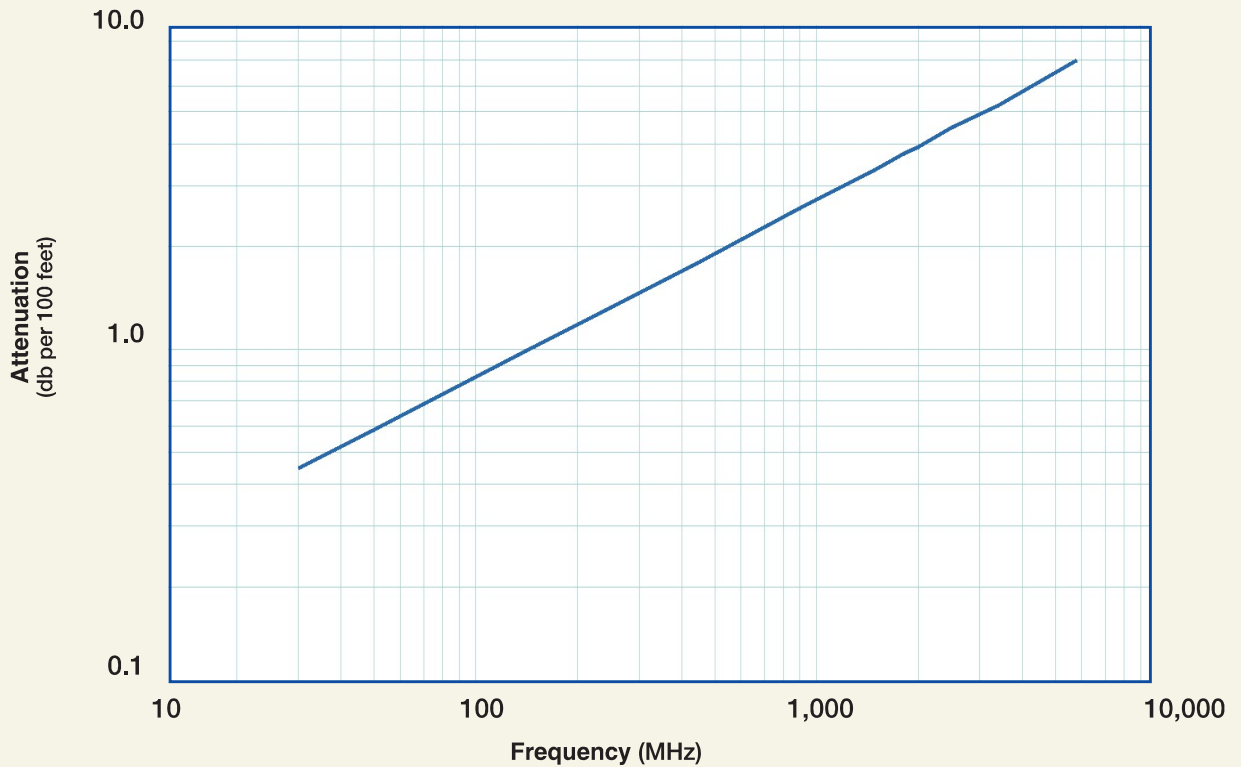
Mechanical Specifications

| 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) | 0.21 | (0.31) |
| Tensile Strength | lb (kg) | 265 | (120.3) |
| Flat Plate Crush | lb/in. (kg/mm) | 210 | (3.75) |

Electrical Specifications

| Performance Property | Units | US | (metric) |
|-------------------------|-------------------|-------|----------|
| Velocity of Propagation | % | 76 | |
| Dielectric Constant | NA | 1.73 | |
| Time Delay | nS/ft (nS/m) | 1.34 | (4.40) |
| Impedance | ohms | 50 | |
| Capacitance | pF/ft (pF/m) | 26.7 | (87.6) |
| Inductance | uH/ft (uH/m) | 0.067 | (0.22) |
| Shielding Effectiveness | dB | >90 | |
| DC Resistance | | | |
| Inner Conductor | ohms/1000ft (/km) | 0.73 | (2.40) |
| Outer Conductor | ohms/1000ft (/km) | 1.20 | (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 | 3400 | 5800 | 8000 |
|-----------------------|------|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|
| Attenuation dB/100 ft | 0.5 | 0.6 | 1.0 | 1.2 | 1.8 | 2.6 | 3.4 | 3.7 | 3.9 | 4.4 | 5.3 | 7.1 | 8.8 |
| Attenuation dB/100 m | 1.5 | 1.9 | 3.3 | 4.1 | 5.9 | 8.5 | 11.1 | 12.2 | 12.9 | 14.5 | 17.2 | 23.2 | 29.0 |
| Avg. Power kW | 11.8 | 9.1 | 5.2 | 4.3 | 3.0 | 2.1 | 1.6 | 1.4 | 1.3 | 1.2 | 1.1 | 0.8 | 0.7 |

Calculate Attenuation =
 $(0.081390) \cdot \sqrt{\text{FMHz}} + (0.000150) \cdot \text{FMHz}$ (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; Jacket = +75°C (167°F); Sea Level; dry air; atmospheric pressure; no solar loading

LMR®-600-LLPX Flexible Low Loss Plenum Coax



Connectors

| Interface | Part Description | Stock Number | Code | VSWR** Freq. (GHz) | Coupling Nut | Inner Contact Attach | Outer Contact Attach | Finish* Body /Pin | Length in (mm) | Width in (mm) | Weight lb (g) |
|-------------|------------------|-----------------|-----------|-----------------------|-----------------|----------------------------|----------------------------|-------------------------|-------------------|------------------|------------------|
| 1. LC Male | Straight plug | TC-600-LCM-PL | 3190-1221 | <1.25:1 (1) | Hex | Solder | Clamp | N/S | 3.1 (78.7) | 1.62 (41.1) | 1.20 (544) |
| 2. N Male | Straight Plug | EZ-600-NMH-PL-X | 3190-2963 | <1.25:1 (2.5) | Hex/Knurl | Spring Finger | Crimp | A/G | 2.1 (53) | 0.92 (23.4) | 0.166 (75.3) |
| 3. N Male | Straight Plug | TC-600-NMH-PL | 3190-760 | <1.25:1 (2.5) | Hex | Solder | Crimp | S/G | 2.1 (53) | 0.92 (23.4) | 0.208 (93.4) |
| 4. N Female | Straight Plug | TC-600-NF-PL | 3190-965 | <1.25:1 (6) | N/A | Solder | Crimp | S/G | 2.3 (58.4) | 0.87 (22.1) | 0.150 (67.8) |
| 5. BNC Male | Right Angle | TC-600-BM-RA | 3190-2734 | <30:1 (4) | Knurl | Solder | Crimp | A/G | 1.8 (45.5) | 1.54 (39.0) | 0.164 (74.3) |



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) |
| 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) |
| Weather Seal Boots | WSB-600 | 3109-401 | Weather seal/strain relief boots (10pk) for use with most popular LMR-600-X series connectors |



Install Tools

| Type | Part Number | Stock Code | Description |
|----------------------|-------------|------------|--|
| Crimp Tool | CT-U | 3192-181 | Crimp Handle (Dies Required) |
| Crimp Tool | CT-600 | 3192-170 | Crimp tool for LMR 600 connector |
| Crimp Dies | Y1720 | 3190-203 | .610" Hex Dies |
| Crimp Rings | CR-600 | 3190-831 | Crimp Rings for TC/EZ-600 connectors (pkg of 10) |
| Midspan Strip Tool | GST-600A | 3190-1051 | For ground strap attachment |
| Cutting Tool | CCT-02 | 3192-165 | Cable end flush cut tool |
| Replacement Blade | RB-02 | 3192-166 | Replacement blade for cutting tool |
| Replacemnt Blade Kit | RB-CST | 3192-086 | Replacement blade kit for all CST strip tools |
| Replacement Blades | RB-456 | 3190-421 | Replacement blades for CST-600C and ST-600EZ |
| Prep Tool | CST-600 | 3192-052 | Prep tool for LMR-600 crimp/clamp style connectors |
| Tool Kit | TK-600EZ | 3190-1602 | Tool kit for LMR-600 crimp/clamp connectors (includes CCT-02, CST-600, CT-600, Tool Pouch) |