

LMR[®]-1200 Flexible Low Loss Communications Coax

Ideal for...

- Medium Antenna Feeder runs
- Jumper Assemblies for 1-5/8" & 2-1/4" Feeders
- Building-Top Sites
- Any application (e.g. WLL, GPS, LMR, WLAN, WISP, WiMax, SCADA, Mobile Antennas) requiring an easily routed, low loss RF cable



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

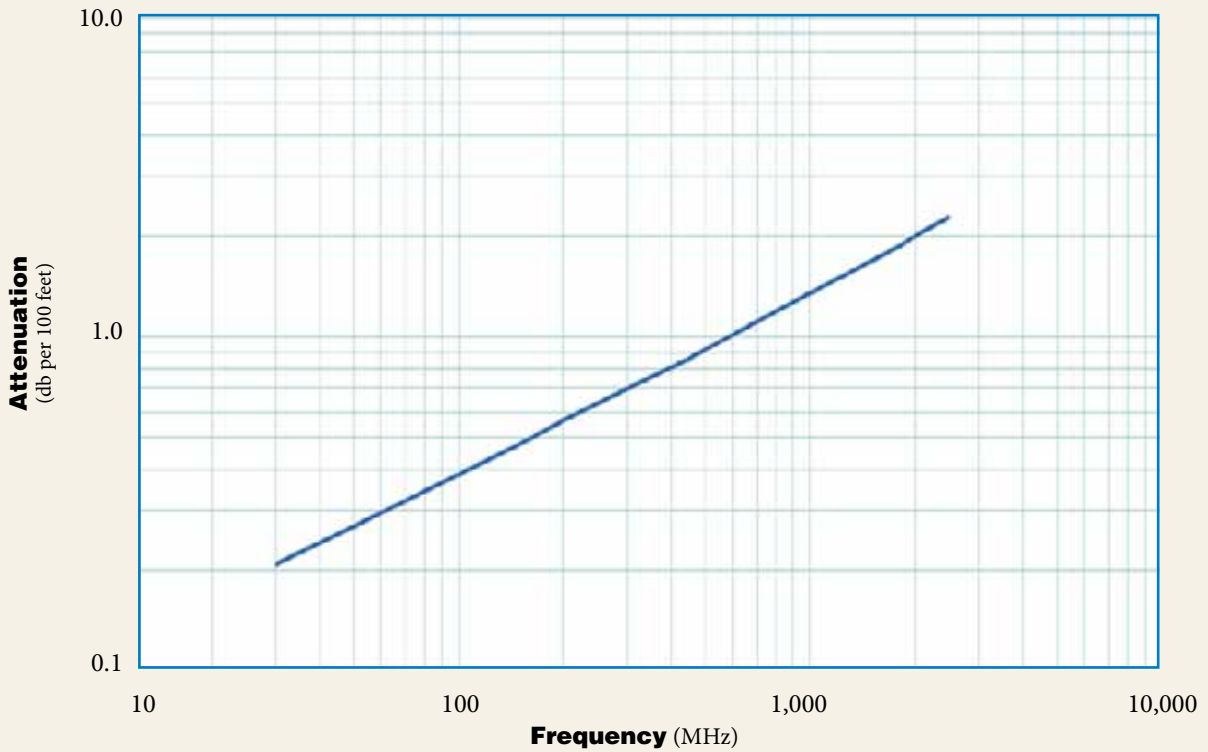
| Construction Specifications | | | |
|-----------------------------|--------------------|-------|---------|
| Description | Material | In. | (mm) |
| Inner Conductor | BC Tube (.309" ID) | 0.349 | (8.86) |
| Dielectric | Foam PE | 0.920 | (23.37) |
| Outer Conductor | Aluminum Tape | 0.926 | (23.52) |
| Overall Braid | Tinned Copper | 0.972 | (24.69) |
| Jacket | (see table) | 1.200 | (30.48) |

| Mechanical Specifications | | | |
|---------------------------|----------------|-------|----------|
| Performance Property | Units | US | (metric) |
| 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 | (20.34) |
| Weight | lb/ft (kg/m) | 0.448 | (0.67) |
| Tensile Strength | lb (kg) | 1300 | (590.2) |
| Flat Plate Crush | lb/in. (kg/mm) | 250 | (4.47) |

| 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) |
| Velocity of Propagation | % | 88 | |
| Dielectric Constant | NA | 1.29 | |
| Time Delay | nS/ft (nS/m) | 1.15 | (3.79) |
| Impedance | ohms | 50 | |
| Capacitance | pF/ft (pF/m) | 23.1 | (75.8) |
| Inductance | uH/ft (uH/m) | 0.058 | (0.19) |
| Shielding Effectiveness | dB | >90 | |
| DC Resistance | | | |
| 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 | |

Attenuation vs. Frequency (typical)



| Frequency (MHz) | 30 | 50 | 150 | 220 | 450 | 900 | 1500 | 1800 | 2000 | 2500 |
|------------------------------|-------|------|------|------|------|------|------|------|------|------|
| Attenuation dB/100 ft | 0.2 | 0.3 | 0.5 | 0.6 | 0.9 | 1.3 | 1.7 | 1.9 | 2.0 | 2.3 |
| Attenuation dB/100 m | 0.7 | 0.9 | 1.6 | 1.9 | 2.8 | 4.2 | 5.5 | 6.1 | 6.5 | 7.4 |
| Avg. Power kW | 12.63 | 9.72 | 5.54 | 4.49 | 3.06 | 2.09 | 1.57 | 1.41 | 1.33 | 1.16 |

Calculate Attenuation =

$(0.037370) \cdot \sqrt{\text{FMHz}} + (0.000160) \cdot \text{FMHz}$ (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 | | Part Number | Stock Code | VSWR** | Coupling Nut | Inner Contact Attach | Outer Contact Attach | Finish* /Pin | Length in (mm) | Width in (mm) | Weight lb (g) |
|------------|-------------------------------|--------------------|------------|---------------|--------------|----------------------|----------------------|--------------|----------------|---------------|----------------|
| 1. | 7-16 DIN Female Straight Jack | EZ-1200-716FC-2 | 3190-2784 | <1.20:1 (2.5) | NA | Spring Finger | Clamp | A/S | 2.3 (58) | 1.73 (44.0) | 0.586 -(265.8) |
| 2. | 7-16 DIN Male Straight Plug | EZ-1200-716MC-2 | 3190-2781 | <1.20:1 (2.5) | Hex | Spring Finger | Clamp | A/S | 2.3 (58) | 1.73 (44.0) | 0.848 (384.6) |
| 3. | N Female Straight Jack | EZ-1200-NFC-2 | 3190-2785 | <1.20:1 (2.5) | NA | Spring Finger | Clamp | A/S | 2.2 (51) | 1.73 (44.0) | 0.630 (285.9) |
| 4. | N Male Straight Plug | EZ-1200-NMC-2 | 3190-2783 | <1.20:1 (2.5) | Hex/Knurl | Spring Finger | Clamp | A/S | 2.4 (61) | 1.73 (44.0) | 0.651 (295.3) |
| 5. | 7/8 EIA Straight Plug | EZ-1200-78EIA-2 | 3190-2780 | <1.15:1 (0.5) | NA | Spring Finger | Clamp | A/S | 3.8 (96) | 2.22 (56.5) | 1.206 (547.0) |
| 6. | 7/8 EIA Right Angle | EZ-1200-78EIA-RA-2 | 3190-2782 | <1.15:1 (0.5) | NA | Spring Finger | Clamp | A/S | 3.1 (80) | 3.07 (78.1) | 1.800 (816.5) |

* Finishes: N=Nickel, S=Silver, G=Gold, SS=Stainless Steel, A=Alballoy **VSWR spec based on 3 foot cable with a connector pair



Install Tools

| Type | Part Number | Stock Code | Description |
|--------------------|-------------|------------|-------------------------------------|
| Midspan Strip Tool | GST-1200A | 3190-436 | For Ground Strap Attachment |
| Wrench | WR-1200A | 3190-512 | 1-9/16" Box Wrench (1 required) |
| Wrench | WR-1200B | 3190-511 | 1-7/16" Box Wrench (1 required) |
| Strip Tool | ST-1200-CH | 3192-124 | For LMR-1200 clamp style connectors |
| Cutting Tool | CCT-02 | 3192-165 | Cable end flush cut tool |
| Replacement Blade | RB-02 | 3192-166 | Replacement blade for cutting tool |



Hardware Accessories

| Type | Part Number | Stock Code | Description |
|----------------------------------|--|------------|--------------------------------------|
| Ground Kit | GK-S1200TT | GK-S1200TT | Standard Grounding Kit (each) |
| Hoisting Grip | HG-1200T | HG-1200T | Split/Laced Type (each) |
| Cold Shrink | CS-90120T | CS-90120T | LMR-900 to -1200 Junction (each) |
| Cold Shrink | CS-60120T | CS-60120T | LMR-600 to -1200 Junction (each) |
| Standard Entry Port Cushion | SC-1200T | SC-1200T | Three Cables (each) |
| Standard Entry Panels | Full Range of Port Styles/Combinations Available | | |
| Hanger Blocks | CB-1200T | CB-1200T | Dual Cable Support Block (kit of 10) |
| Hanger Block Supporting Hardware | Complete Range of Supporting Hardware & Adapters Available | | |
| Snap-In Hangers | SH-U1200T | SH-U1200T | Snap-In Hangers (Kit of 10) |