

# LMR<sup>®</sup>-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

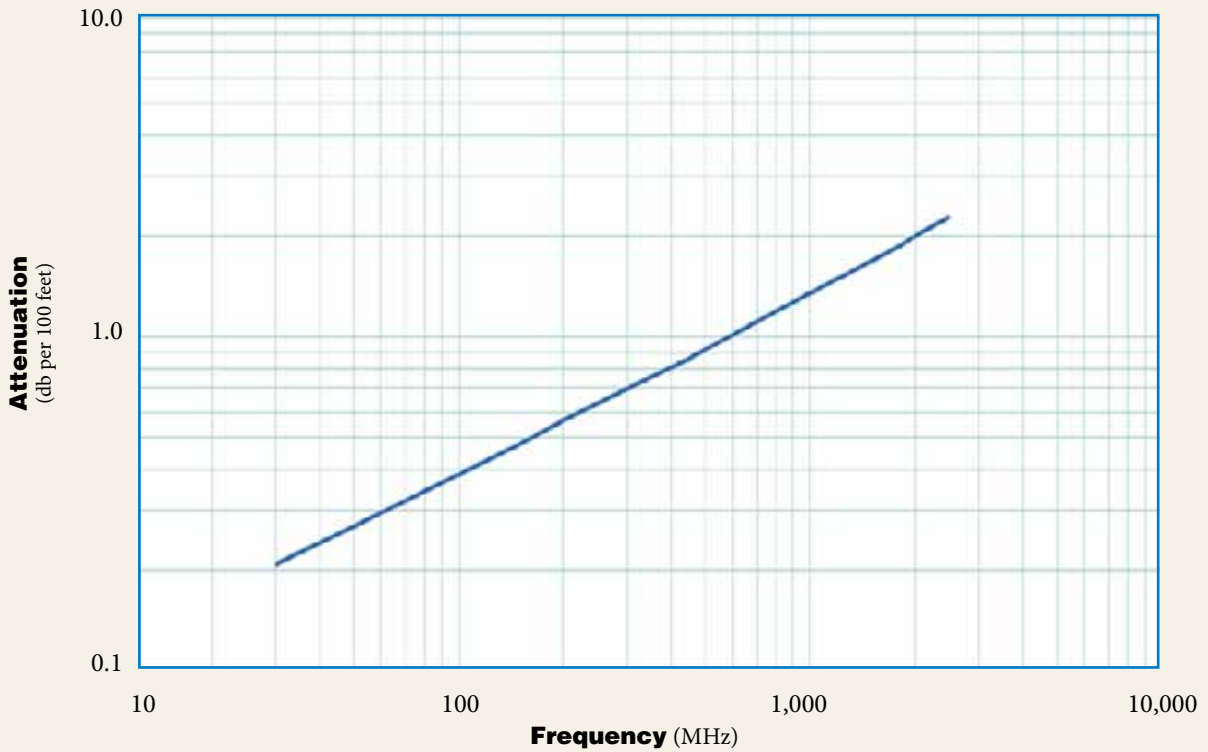
Construction Specifications			
Description	Material	In.	(mm)
Inner Conductor	BC Tube (.309" ID)	0.349	(8.86)
Dielectric	Foam PE	0.920	(23.37)
Outer Conductor	Aluminum Tape	0.926	(23.52)
Overall Braid	Tinned Copper	0.972	(24.69)
Jacket	(see table)	1.200	(30.48)

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
<b>Attenuation dB/100 ft</b>	0.2	0.3	0.5	0.6	0.9	1.3	1.7	1.9	2.0	2.3
<b>Attenuation dB/100 m</b>	0.7	0.9	1.6	1.9	2.8	4.2	5.5	6.1	6.5	7.4
<b>Avg. Power kW</b>	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](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* Body /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)