

# LMR<sup>®</sup>-600 Flexible Low Loss Communications Coax

## Ideal for...

- Jumper Assemblies in Wireless Communications Systems
- Short Antenna Feeder runs
- 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-600	Outdoor	PE	Black	54003
LMR-600-DB	Outdoor/Watertight	PE	Black	54093
LMR-600-FR	Indoor/Outdoor Riser CMR	FRPE	Black	54032
LMR-600-FR-PVC	Indoor/Outdoor Riser CMR	FRPVC	Black	54074
LMR-600-PVC	General Purpose	PVC	Black	54219
LMR-600-PVC-W	General Purpose	PVC	White	54206

Construction Specifications			
Description	Material	In.	(mm)
Inner Conductor	Solid BCCAI	0.176	(4.47)
Dielectric	Foam PE	0.455	(11.56)
Outer Conductor	Aluminum Tape	0.461	(11.71)
Overall Braid	Tinned Copper	0.490	(12.45)
Jacket	(see table)	0.590	(14.99)

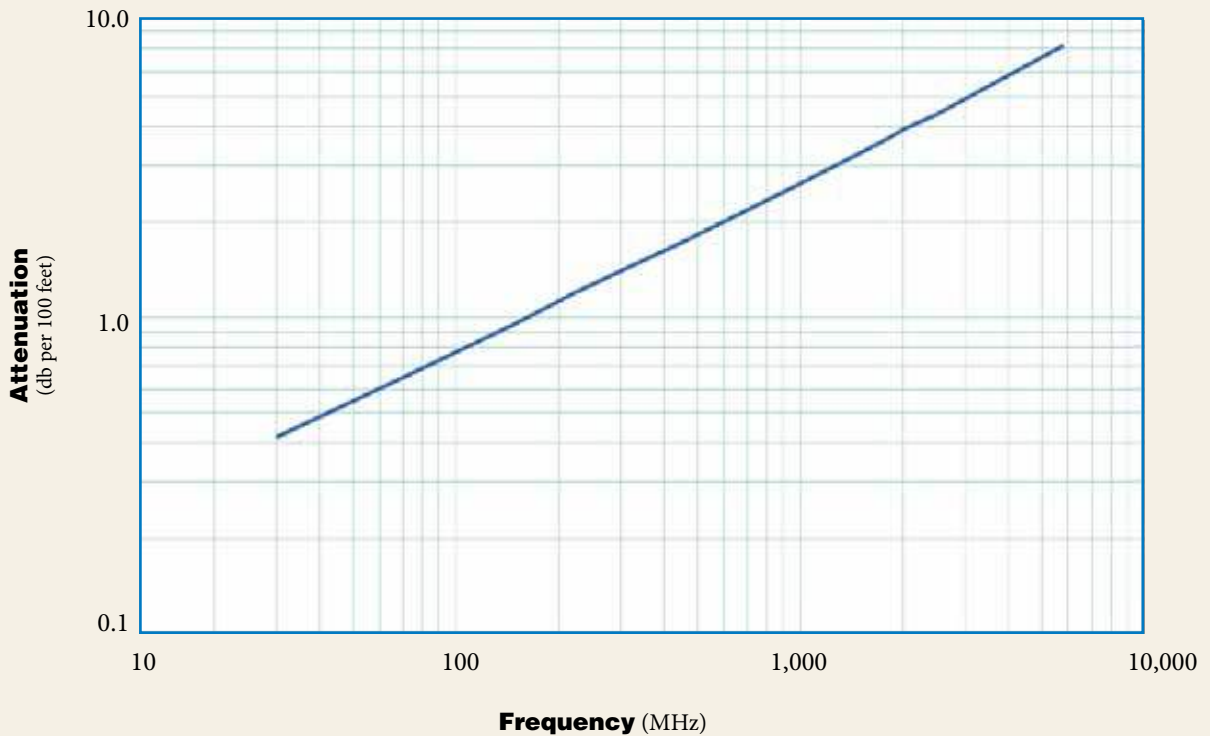
Mechanical Specifications			
Performance Property	Units	US	(metric)
Bend Radius: installation	in. (mm)	1.50	(38.1)
Bend Radius: repeated	in. (mm)	6.0	(152.4)
Bending Moment	ft-lb (N-m)	2.75	(3.73)
Weight	lb/ft (kg/m)	0.131	(0.20)
Tensile Strength	lb (kg)	350	(158.9)
Flat Plate Crush	lb/in. (kg/mm)	60	(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)
Velocity of Propagation	%	85	
Dielectric Constant	NA	1.32	
Time Delay	nS/ft (nS/m)	1.17	(3.83)
Impedance	ohms	50	
Capacitance	pF/ft (pF/m)	23.4	(76.6)
Inductance	uH/ft (uH/m)	0.058	(0.19)
Shielding Effectiveness	dB	>90	
DC Resistance			
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	

S MICROWAVE

**Attenuation vs. Frequency (typical)**



Frequency (MHz)	30	50	150	220	450	900	1500	1800	2000	2500	5800	8000
<b>Attenuation dB/100 ft</b>	0.4	0.5	1.0	1.2	1.7	2.5	3.3	3.7	3.9	4.4	7.3	8.8
<b>Attenuation dB/100 m</b>	1.4	1.8	3.2	3.9	5.6	8.2	10.9	12.1	12.8	14.5	23.8	29.0
<b>Avg. Power kW</b>	5.51	4.24	2.41	1.97	1.35	0.93	0.70	0.63	0.59	0.52	0.32	0.26

**Calculate Attenuation =**

$(0.075550) \cdot \sqrt{\text{FMHz}} + (0.000260) \cdot \text{FMHz}$  (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

# LMR®-600 Flexible Low Loss Communications Coax



Connectors			Part	Stock	VSWR**	Coupling	Inner Contact Attach	Outer Contact Attach	Finish*	Length	Width	Weight
Interface	Description	Number	Code	Freq. (GHz)	Nut				/Pin	in (mm)	in (mm)	lb (g)
1. 7/8 EIA	Flange	EZ-600-78EIA	3190-1373	<1.25:1 (2.5)	NA	Spring Finger Clamp	S/S	2.3 (58)	2.60 (66.0)	0.873 (396.0)		
2. 7-16 DIN Female	Straight Jack	TC-600-716FC	3190-375	<1.25:1 (2.5)	NA	Solder Clamp	S/S	1.1 (28)	1.00 (25.4)	0.249 (112.9)		
3. 7-16 DIN	Bulkhead Plug	EZ-600-716M-X	3190-2643	<1.30:1 (6)	Hex	Spring Finger Crimp	A/S	1.6 (42)	1.38 (35.0)	0.209 (94.8)		
4. 7-16 DIN	Straight Plug	TC-600-716M-X	3190-2642	<1.30:1 (6)	Hex	Solder Crimp	A/S	1.6 (40)	1.38 (35.0)	0.191 (86.6)		
5. 7-16 DIN	Straight Plug	TC-600-716MC	3190-502	<1.25:1 (2.5)	Hex	Solder Clamp	S/S	2.0 (51)	1.30 (33.0)	0.347 (157.4)		
6. 7/16 Male	Right Angle	EZ-600-716M-RA-X	3190-2546	<1.35:1 (6)	Hex	Spring Finger Crimp	A/G	1.6 (40)	1.38 (35.0)	0.462 (210.0)		
7. 7-16 DIN	Right Angle	TC-600-716M-RA-D	3190-2599	<1.35:1 (6)	Hex	Solder Crimp	A/S	1.7 (44)	2.00 (50.9)	0.362 (164.2)		
8. 7-16 DIN	Straight Jack	EZ-600-716F	3190-2447	<1.25:1 (6)	Hex	Spring Finger Crimp	A/G	1.8 (45)	1.32 (33.6)	0.158 (71.7)		
9. HN Male	Straight Plug	TC-600-HNMC	3190-1429	<1.25:1 (<1)	Knurl	Solder Clamp	S/G	2.3 (59.2)	0.88 (22.4)	0.25 (113)		
10. LC Male	Straight Plug	TC-600-LCM	3190-1406	<1.25:1 (<1)	Hex	Solder Clamp	N/S	3.1 (78.0)	1.62 (41.1)	1.20 (544)		
11. N Female	Straight Jack	TC-600-NF-X	3190-2816	<1.30:1 (6)	NA	Solder Crimp	A/G	1.7 (43)	0.69 (17.6)	0.076 (34.6)		
12. N Female	Straight Jack	EZ-600-NF-X	3190-2817	<1.30:1 (6)	NA	Spring Finger Crimp	A/G	1.7 (43)	0.69 (17.6)	0.090 (40.6)		
13. N Female	Bulkhead Jack	EZ-600-NF-BH	3190-616	<1.25:1 (2.5)	NA	Spring Finger Crimp	S/G	2.4 (61)	0.88 (22.4)	0.195 (88.5)		
14. N Female	Bulkhead Jack	TC-600-NF-BH	3190-589	<1.25:1 (2.5)	NA	Solder Crimp	S/G	2.4 (61)	0.88 (22.4)	0.195 (88.5)		
15. N Female	Bulkhead Jack	TC-600-NFC-BH	3190-466	<1.25:1 (2.5)	NA	Solder Clamp	S/G	2.2 (56)	0.94 (23.9)	0.214 (97.1)		
16. N Male	Straight Plug	EZ-600-NMK	3190-669	<1.25:1 (2.5)	Knurl	Spring Finger Crimp	S/G	2.1 (53)	0.92 (23.4)	0.164 (74.4)		
17. N Male	Straight Plug	EZ-600-NMC-2-D	3190-2641	<1.25:1 (6)	Hex/Knurl	Spring Finger Clamp	A/G	2.1 (53)	0.92 (23.4)	0.202 (91.6)		
18. N Male	Straight Plug	EZ-600-NMH-X	3190-2627	<1.25:1 (8)	Hex/Knurl	Spring Finger Crimp	A/G	2.1 (53)	0.92 (23.4)	0.164 (74.4)		
19. N Male	Straight Plug	TC-600-NMH-X	3190-2628	<1.25:1 (8)	Hex/Knurl	Solder Crimp	A/G	2.1 (53)	0.92 (23.4)	0.166 (75.3)		
20. N Male	Right Angle	EZ-600-NMH-RA-X	3190-2639	<1.35:1 (6)	Hex	Spring Finger Crimp	A/G	2.0 (50)	1.42 (36.0)	0.224 (101.7)		
21. N Male	Right Angle	TC-600-NMH-RA-D	3190-2427	<1.35:1 (6)	Hex	Solder Crimp	A/G	1.8 (46.5)	1.62 (41.2)	0.185 (84.3)		
22. N Male	Straight Plug	TC-600-NMH-75-50	3190-1610	<1.35:1 (6)	Hex	Solder Crimp	N/G	2.1 (52.8)	0.91 (23.1)	0.130 (59.0)		
23. BNC Male	Right Angle	TC-600-BM-RA	3190-2734	1.30:1 (4)	Knurl	Solder Crimp	A/G	1.8 (45.5)	1.54 (39.0)	0.164 (74.3)		
24. TNC Male	Straight Plug	TC-600-TM-X	3190-2530	<1.25:1 (6)	Hex/Knurl	Solder Crimp	A/G	2.3 (57.6)	0.75 (19.0)	0.100 (45.6)		
25. TNC Male	Straight Plug	EZ-600-TM-X	3190-2531	<1.25:1 (6)	Hex/Knurl	Spring Finger Crimp	A/G	2.3 (57.6)	0.75 (19.0)	0.100 (45.6)		
26. TNC Male	Reverse Polarity	EZ-600-TM-RP	3190-796	<1.25:1 (2.5)	Knurl	Spring Finger Crimp	A/G	2.2 (56)	0.87 (22.0)	0.112 (50.8)		
27. TNC Male	Reverse Polarity	TC-600-TM-RP	3190-1064	<1.25:1 (6)	Knurl	Solder Crimp	N/G	2.1 (53.3)	0.88 (17.3)	0.112 (50.8)		
28. TNC Male	Right Angle	TC-600-TM-RA-D	3190-2707	<1.35:1 (6)	Hex/Knurl	Solder Crimp	A/G	1.6 (41)	1.75 (44.5)	0.164 (74.3)		
29. TNC Female	Reverse Polarity	EZ-600-TF-RP	3190-797	<1.25:1 (2.5)	NA	Spring Finger Crimp	A/G	2.3 (58)	0.87 (22.0)	0.100 (45.4)		
30. TNC Female	Reverse Polarity	TC-600-TF-RP	3190-1065	<1.35:1 (6)	Knurl	Solder Crimp	N/G	2.2 (55.8)	0.88 (17.3)	0.100 (45.4)		
31. UHF Male	Straight Plug	EZ-600-UM	3190-615	<1.25:1 (2.5)	Knurl	Spring Finger Crimp	S/G	1.7 (43)	0.88 (22.4)	0.164 (74.4)		
32. UHF Male	Straight Plug	TC-600-UMC	3190-213	<1.25:1 (2.5)	Knurl	Solder Clamp	S/G	1.7 (43)	0.88 (22.4)	0.198 (89.8)		

Finish metals: N=Nickel, S=Silver, G=Gold, SS=Stainless Steel, A=Alballoy \*\*VSWR spec based on 3 foot cable with a connector pair \*Available in bulk pack



Type	Part Number	Stock Code	Description
Crimp Tool	CT-U	3192-181	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	CST-600	3192-052	Combination prep tool for LMR-600 crimp and clamp style connectors
Crimp Tool	CT-600	3192-170	Crimp tool for LMR 600 connectors
Replacement Blades	RB-456	3190-421	Replacement Blades for Strip Tools
Deburr Tool	DBT-U	3192-001	Removes center conductor rough edges
Midspan Strip Tool	GST-600A	3190-1051	For ground strap attachment
Wrench	WR-600	3190-1435	15/16" Box Wrench (2 required for EZ-600-NMC-2)
Cutting Tool	CCT-02	3192-165	Cable end flush cut tool
Replacement Blade	RB-02	3192-166	Replacement blade for cutting tool
Replacement Blade Kit	RB-CST	3192-086	Replacement blade kit for all CST strip tools
Tool Kit	TK-600EZ	3190-1602	Tool kit for LMR crimp/clamp connectors (includes CCT-02, CST-600, CT-600, Tool Pouch)



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)
Stand. Entry Port Cushion		SC-600T-3	Three cables (each)
Snap-In Hangers	SH-U600T	SH-U600T	Snap-In Hangers (Kit of 10)
Hanger Block Supporting Hardware			Complete Range of Supporting Hardware & Adapters Available
Weather Proof Boot	IPB-600-NM	3109-600-NM	LMR-600 Male IP boot suitable for type N, TNC, BNC, 4310, 4195
Weather Proof Boot	IPB-600-NF	3109-600-NF	LMR-600 Female IP boot suitable for type N, TNC, BNC, 4310, 4195
Weather seal boots	WSB-600	3109-401	Weather seal strain relief boot (10 pk) for use with most popular LMR-600-X series connectors