

Times Microwave LMR-500 Low Loss Flexible Coax Cable Black PE Jacket



LMR-500



Times Microwave Systems Connector Specification

Configuration

- Low Loss Flexible Cable
- 2 Shield(s)

Features

- Easily Routed
- Low Loss Cable
- RF Shielding > 90dB
- Designed for Outdoor Use

Applications

- Jumper Assemblies
- Short Antenna Feeder Runs
- Wireless Communications

Description

LMR-500 coax cable from Fairview is only one of a large number of radio frequency twinaxial and coaxial cable types specifically stocked to be ready for quick shipment. Fairview Microwave LMR-500 coax cable is manufactured in a flexible design and has a 50 Ohm impedance. This low loss flexible 50 Ohm coax cable LMR-500 is constructed with a 0.5 inch diameter and PE jacket.

LMR-500 flexible 50 Ohm coax cable with PE jacket is rated for a 8 GHz maximum operating frequency. This 50 Ohm 0.5 inch diameter and low loss flexible coax cable is built with a shield count of 2 and RF shielding of 90 dB.

Fairview Microwave LMR-500 coax is constructed with PE (F) dielectric and a maximum operating temperature of 85 degrees C. Times Microwave LMR-500 coax cable specs for this wire properties can be found on its RF coax cable LMR-500 datasheet PDF specifications above.

LMR-500 cable is part of more than one million RF, microwave and millimeter wave parts in stock at Fairview. This Times Microwave low loss LMR-500 coax cable is ready to buy and can be shipped worldwide. Fairview also maintains a wide selection of other radio frequency twinaxial and coaxial cable types that ship same-day from our warehouse as with the rest of our other RF/microwave and millimeter wave components.

* LMR™ is a trademark of Times Microwave Systems.

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		8	GHz
Impedance		50		Ohms
Velocity of Propagation		86		%
Time Delay		1.18 [3.87]		ns/ft [ns/m]
Shielding Effectiveness	90			dB
Dielectric Withstanding Voltage (DC)			3,000	Vdc
Jacket Spark			8,000	Vrms
Inner Conductor DC Resistance			0.82	Ohms/1000ft

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Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Outer Conductor DC Resistance			1.27	Ohms/1000ft
Nominal Capacitance		23.6 [77.43]		pF/ft [pF/m]
Nominal Inductance		0.059 [0.19]		uH/ft [uH/m]
Input Power (Peak)			22	kWatts

Performance by Frequency Band

Description	F1	F2	F3	F4	F5	Units
Frequency	50	150	220	450	900	MHz
Attenuation, Typ	0.7	1.2	1.5	2.2	3.1	dB/100ft
	2.3	3.94	4.92	7.22	10.17	dB/100m
Input Power (CW), Max	3,393	1,931	1,583	1,088	752	Watts

Description	F6	F7	F8	F9	F10	Units
Frequency	1.5	1.8	2	2.5	5.8	GHz
Attenuation, Typ	4.1	4.6	4.8	5.5	8.9	dB/100ft
	13.45	15.09	15.75	18.04	29.2	dB/100m
Input Power (CW), Max	569	515	485	428	264	Watts

Electrical Specification Notes:

Values at 25°C, sea level.

Attenuation = $0.096590 \cdot \sqrt{\text{FMHz}} + 0.000260$

Mechanical Specifications

Diameter	0.5 in [12.7 mm]
Weight	0.105 lbs/ft [0.16 kg/m]
Min. Bend Radius (Installation)	1.25 in [31.75 mm]
Min. Bend Radius (Repeated)	5 in [127 mm]
Bending Moment	1.75 lbs-ft [2.37 N-m]
Tensile Strength	260 lbs [117.93 kg]
Flat Plate Crush	50 lbs/in [0.89 kg/mm]

Construction Specifications

Description	Material and Plating	Diameter
Inner Conductor	Copper Clad Aluminum, 1 Strand	0.142 in [3.61 mm]
Conductor Type	Solid	
Dielectric	PE (F)	0.37 in [9.4 mm]
First Shield	Aluminum Tape	0.376 in [9.55 mm]
Second Shield	Tinned Copper	0.405 in [10.29 mm]

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Construction Specifications

Description	Material and Plating	Diameter
Jacket	PE, Black	0.5 in [12.7 mm]

Environmental Specifications

Temperature

Operating Range	-40 to 85 deg C
Installation Range	-40 to 85 deg C
Storage Range	-70 to 85 deg C

Environmental Specification Notes:
Designed for outdoor use

Compliance Certifications (see [product page](#) for current document)

Plotted and Other Data

Notes:

Times Microwave LMR-500 Low Loss Flexible Coax Cable Black PE Jacket from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Lewisville, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [Times Microwave LMR-500 Low Loss Flexible Coax Cable Black PE Jacket LMR-500](#)

URL: <https://www.fairviewmicrowave.com/lmr500-low-loss-flexible-coax-cable-pe-jacket-lmr-500-p.aspx>

The information contained within this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part in order to implement improvements. Fairview Microwave reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Fairview Microwave does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Fairview Microwave does not assume liability arising out of the use of any part or document.

LMR-500 CAD Drawing
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