

Low Loss TNC Male to TNC Male Cable

LMR-240 Coax in 120 Inch with Times Microwave Connectors

The TNC male to TNC male 120 inch cable using LMR-240 coax, part number FMCA2161-120, from Fairview Microwave is in-stock and ships same day. This Fairview TNC to TNC cable assembly has a male to male gender configuration with 50 ohm flexible LMR-240 coax. Fairview Microwave's flexible RF cable assemblies are ideal for applications where tight bends and continual flexure are required. The FMCA2161-120 TNC male to TNC male cable assembly operates to 5.8 GHz. The double shielding of this Fairview cable assembly provides excellent shielding effectiveness of better than 90 dB.

Custom versions of most RF cable assemblies can be built and shipped same day. Custom cable assembly lengths can be obtained by specifying the desired length on the web site at time of order or by contacting a sales representative. Other RF cable assembly value added services including connector orientation or clocking, heat shrink booting and labeling are also available. RF testing can also be performed to document the electrical performance of your cable assembly.

Electrical Specifications

Description	Min	Typ	Max	Units
Frequency Range	DC		5.8	GHz
VSWR			1.5:1	
Velocity of Propagation		84		%
RF Shielding	90			dB
Capacitance		24.2 [79.4]		pF/ft [pF/m]
Inductance		0.06 [0.2]		uH/ft [uH/m]
DC Resistance Inner Conductor		3.2 [10.5]		Ω /1000ft [Ω /Km]
DC Resistance Outer Conductor		3.89 [12.76]		Ω /1000ft [Ω /Km]

Performance by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	0.25	0.5	1	2.5	5.8	GHz
Insertion Loss (Typ.)	0.59	0.76	1	1.48	2.24	dB

Electrical Specification Notes:

The Insertion Loss data above is based on the performance specifications of the coax cable and connectors used in this assembly. The Insertion Loss includes an estimated insertion loss of 0.1 dB per connector.

Mechanical Specifications

Cable Assembly

Length* 120 in [304.8 cm]

Weight 1.4 lbs [635.03 g]

Cable

Cable Type LMR-240

Impedance 50 Ohms

Inner Conductor Type Solid

Inner Conductor Material and Plating Copper



Configuration:

- TNC Male
- TNC Male
- LMR-240

Features:

- Max Frequency 5.8 GHz
- Shielding Effectivity > 90 dB
- 84% Phase Velocity
- Double Shielded
- PE Jacket

Applications:

- General Purpose
- Laboratory Use

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Dielectric Type	PE (F)
Number of Shields	2
Shield Layer 1	Tinned Copper
Shield Layer 2	Aluminum Tape
Jacket Material	PE, Black
Jacket Diameter	0.24 in [6.1 mm]

Connectors

Description	Connector 1	Connector 2
Type	TNC Male	TNC Male
Configuration	Straight	Straight
Impedance	50 Ohms	50 Ohms
Contact Material & Plating	Beryllium Copper, Gold	Beryllium Copper, Gold
Contact Plating Spec.	50 µin	50 µin
Dielectric Type	PTFE	PTFE
Body Material & Plating	Brass, Tri-Metal	Brass, Tri-Metal
Body Plating Spec.	80 µin	80 µin
Coupling Nut Material & Plating	Brass, Tri-Metal	Brass, Tri-Metal
Coupling Nut Plating Spec.	80 µin	80 µin

Environmental Specifications

Temperature

Operating Range	-40 to +85 deg C
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Compliance Certifications (see [product page](#) for current document)

Plotted and Other Data

Notes:

How to Order

Part Number Configuration:

FMCA2161 - xx uu

cm = Centimeters
 <blank> = Inches
 Length

Example: FMCA2161-12 = 12 inches long cable
 FMCA2161-100cm = 100 cm long cable

Low Loss TNC Male to TNC Male Cable LMR-240 Coax in 120 Inch with Times Microwave Connectors from Fairview Microwave has same day shipment for domestic and International orders. Our RF, microwave and fiber optic products maintain a 99% availability and are part of the broadest selection in the industry.

Click the following link to obtain additional part information: [Low Loss TNC Male to TNC Male Cable LMR-240 Coax in 120 Inch with Times Microwave Connectors FMCA2161-120](#)

URL: <https://www.fairviewmicrowave.com/low-loss-tnc-male-tnc-male-cable-lmr240-coax-fmca2161-120-p.aspx>

The information contained in 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 any liability arising out of the use of any part or documentation.



REVISIONS			
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A	INITIAL RELEASE	3/27/2020	S.ELLIS

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Fairview Microwave™ an INFINITe brand TITLE Low Loss TNC Male to TNC Male Cable LMR-240 Coax in 120 Inch with Times Microwave Connectors	UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN [] ARE MILLIMETERS <u>TOLERANCES:</u> <table><tr><td>.X = ±.2 [5.08]</td><td>FRACTIONS ± 1/32</td></tr><tr><td>.XX = ±.02 [.51]</td><td></td></tr><tr><td>.XXX = ±.005 [.13]</td><td>ANGLES ± 1°</td></tr></table> <u>CABLE LENGTH (L) TOLERANCES:</u> <table><tr><td>L ≤ 12 [305]</td><td>= +1 [25] / -0</td></tr><tr><td>12 [305] < L ≤ 60 [1524]</td><td>= +2 [51] / -0</td></tr><tr><td>60 [1524] < L ≤ 120 [3048]</td><td>= +4 [102] / -0</td></tr><tr><td>120 [3048] < L ≤ 300 [7620]</td><td>= +6 [152] / -0</td></tr><tr><td>300 [7620] < L</td><td>= +5%L / -0</td></tr></table> ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY. <table><tr><td>SIZE</td><td>CAGE CODE</td><td>DRAWN BY</td><td>ITEM NO.</td><td>REV</td></tr><tr><td>A</td><td>3FKR5</td><td>K.DANG</td><td>FMCA2161</td><td>A</td></tr></table>	.X = ±.2 [5.08]	FRACTIONS ± 1/32	.XX = ±.02 [.51]		.XXX = ±.005 [.13]	ANGLES ± 1°	L ≤ 12 [305]	= +1 [25] / -0	12 [305] < L ≤ 60 [1524]	= +2 [51] / -0	60 [1524] < L ≤ 120 [3048]	= +4 [102] / -0	120 [3048] < L ≤ 300 [7620]	= +6 [152] / -0	300 [7620] < L	= +5%L / -0	SIZE	CAGE CODE	DRAWN BY	ITEM NO.	REV	A	3FKR5	K.DANG	FMCA2161	A	THIRD-ANGLE PROJECTION THE INFORMATION AND DESIGN IN THIS DOCUMENT IS THE PROPERTY OF FAIRVIEW MICROWAVE CORPORATION. ALL RIGHTS RESERVED. <table><tr><td>SHEET</td><td>1</td><td>OF</td><td>1</td></tr><tr><td>SCALE</td><td colspan="3">N/A</td></tr></table>	SHEET	1	OF	1	SCALE	N/A		
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