L-com™
an INFINITE brand

Outdoor Rated N Male to N Male Low PIM Cable Using
SPO-500 Coax Using Times Microwave Parts 4 Feet

LCCA31024-FT4

Configuration

- Connector 1: N Male
- Connector 2: N Male
- Cable Type: SPO-500-LC

Features

- 100% Tested with PIM Test Results Marked on Cable
- Lightweight and Extremely Flexible
- Low Loss with Excellent VSWR
- IP67 (when mated)
- Using Times Microwave Components

Applications

- Distributed Antenna Systems (DAS)
- Multi-Carrier Communication Systems
- PIM Testing

CENTER CONDUCTOR — JACKET ∅ .530 [13.46]
OUTER CONDUCTOR — DIELECTRIC
SECTION VIEW
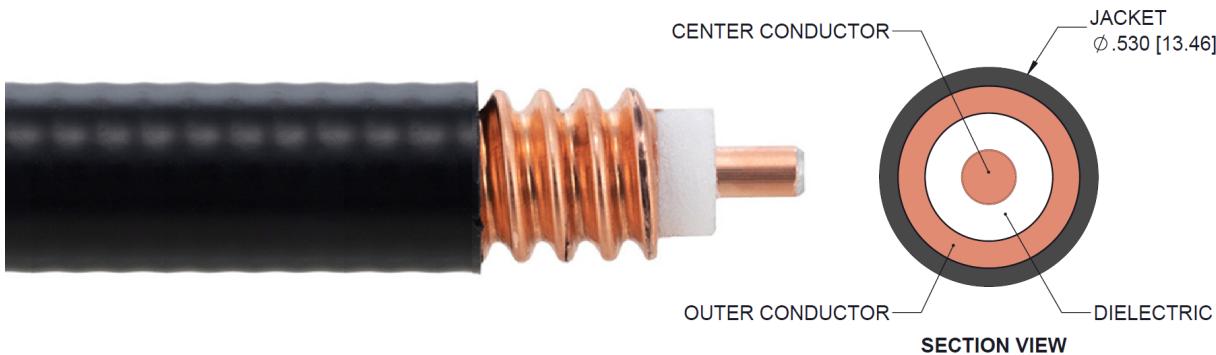
Description

L-com's LCCA31024-FT4 is a outdoor rated N male to N male low PIM cable using SPO-500 coax using Times Microwave parts 4 feet and ships same-day. The SPO-500-LC coax of this N cable uses the foam PE dielectric with a VoP of 83%. These corrugated RF cable assemblies are extremely durable and ideal for high power applications. Our L-com N to N cable assembly has a male to male gender configuration with corrugated SPO-500-LC series coax and operates to 6 GHz. The jacketed copper shield provides reliable durability. With passive intermodulation levels better than -158 dBc, our cable assembly design is ideal where low PIM is desired. Times Microwave cable is used in each assembly and TMS components are used to form connections with the super flexible low PIM cable. These cable assemblies are expertly built to satisfy your specific need with high quality Times Microwave Systems manufactured parts.

Custom versions of this N male to N male cable, along with the rest of L-com's other RF assemblies, can also be built and shipped same day. Other available RF cable assembly value added services from L-com include connector orientation or clocking, heat shrink booting and custom labeling. RF testing can also be performed to document the electrical performance of your cable assembly. Contact a sales representative for testing or custom RF cable quotes. Part number LCCA31024-FT4 L-com Outdoor Rated N Male to N Male Low PIM Cable Using SPO-500 Coax Using Times Microwave Parts 4 Feet data sheet PDF includes details of the RF product specifications, CAD drawing(s) and dimensions below.

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Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		6	GHz
VSWR			1.4:1	
Velocity of Propagation		83		%
Passive Intermodulation			-158	dBc
Capacitance		24 [78.74]		pF/ft [pF/m]

Specifications by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	0.5	1	2.5	6		GHz
Insertion Loss (Max.)	0.24	0.35	0.49	0.88		dB

Electrical Specification Notes:
    PIM test results vary between cables
    The Insertion Loss data above is based on the performance specifications of the coax used in this assembly. The Insertion Loss
    includes an estimated insertion loss of 0.1*SQRT(FGHz) dB per connector.

Mechanical Specifications

Cable Assembly
 Length*   48 in [121.92 cm]

Weight   0.294 lbs [133.36 g]

Cable
Cable Type   SPO-500-LC
Impedance   50 Ohms
Inner Conductor Type   Solid
Inner Conductor Material and Plating   Copper Clad Aluminum
Dielectric Type   Foam PE
Number of Shields   1
Outer Conductor Material and Plating   Copper
Jacket Material   PE, Black
Jacket Diameter   0.53 in [13.46 mm]

One Time Minimum Bend Radius   2.25 in [57.15 mm]

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Connectors

Description	Connector 1	Connector 2
Type	N Male	N Male
Impedance	50 Ohms	50 Ohms
Mating Cycles	500	500
Contact Material and Plating	Brass, Silver	Brass, Silver
Contact Plating Specification	200 µin	200 µin
Dielectric Type	PTFE	PTFE
Body Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Body Plating Specification	80 µin	80 µin
Coupling Nut Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Coupling Nut Plating Specification	80 µin	80 µin
Torque	6 in-lbs 0.68 Nm	6 in-lbs 0.68 Nm

Environmental Specifications
Temperature
Operating Range   -40 to +85 deg C

Compliance Certifications (see product page for current document)

Plotted and Other Data
Notes:

USA & Canada **+1(800) 341-5266** | International **+1(978) 682-6936** | **l-com.com**

Outdoor Rated N Male to N Male Low PIM Cable Using
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LCCA31024-FT4

How to Order

Part Number Configuration: **LCCA31024**   **- xx   uu**

Unit of Measure:
cm = Centimeters
<blank> = Inches
Length
Base Number
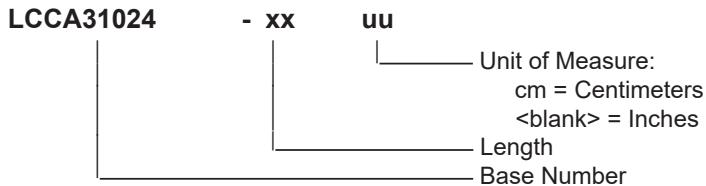
Example: LCCA31024-12 = 12 inches long cable
LCCA31024-100cm = 100 cm long cable

Outdoor Rated N Male to N Male Low PIM Cable Using SPO-500 Coax Using Times Microwave Parts 4 Feet from L-com has same day shipment for domestic and International orders. L-com is a leading manufacturer of wired and wireless connectivity products and committed to in-stock availability and same day shipping. Our portfolio includes coaxial cable assemblies, connectors, adapters and custom products as well as lightning and surge protectors, NEMA rated enclosures, and an RF product line which includes antennas, amplifiers, passive, and active components.

Outdoor Rated N Male to N Male Low PIM Cable Using SPO-500 Coax Using Times Microwave Parts 4 Feet

L-com CAD Drawing

NOTES:

1. CABLES 84" AND UNDER HAVE 1 LABEL CENTERED. CABLES OVER 84" HAVE 2 LABELS, ONE AT EACH END 12" FROM END OF CONNECTOR.

2. 6" FROM CABLE END, 1 PLACE, FOR ALL LENGTHS OF CABLE.

Drawing labels:
- CONTACT
- N MALE
- SEE NOTE 2
- PIM LEVEL -zzzdBc S/N: XXXXXXXXX
- SEE NOTE 1
- www.L-COM.com LCCA31024 S/N: XXXXXXXXX
- SPO-500
- LENGTH MEASURED FROM CONTACT TO CONTACT
- 2X HEAT SHRINK
- 13/16 HEX
- N MALE
- CONTACT

Revisions block:

REV.	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	09/02/2022	AGANWANI

Tolerances block:

UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN [ ] ARE MILLIMETERS

TOLERANCES:
X = ± 2 [5.08]
XX = ± .02 [.51]
XXX = ± .005 [.13]
FRACTIONS ± 1/32
ANGLES ± 1°

CABLE LENGTH (L) TOLERANCES:
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

ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.

Title block:

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SIZE	CAGE CODE	DRAWN BY	
A	43321	DZINN	

ITEM NO. LCCA31024

THIRD-ANGLE PROJECTION

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SHEET 1 OF 1
SCALE N/A
REV A

T-Rev.D