

# MTRA61274Cx2 M2M LTE MIMO Antenna 617-960 MHz/1350-2700 MHz



The user experience requirements will become more demanding over the next couple of years. The resources of today's mobile broadband networks are becoming insufficient as operators offer broadband multimedia access anywhere to meet the increased demand. Long Term Evolution (LTE) promises to fulfill the requirements set on future networks by delivering ultra-fast broadband services with increased cell capacity.

This M2M LTE MIMO antenna features wide bandwidth as a solution to cover 617 MHz to 960 MHz and 1350 MHz to 2700 MHz. The MTRA61274CB2 antenna is the ideal choice when multiple bandwidths are required in various regional and global applications.

### FEATURES AND BENEFITS

- Covers 617-960 MHz and 1350-2700 MHz
- Operates simultaneously in more than eleven frequency bands supporting – LTE, cellular, Quadband GSM+UMTS / 3G, AWS, WI-FI, WLAN, WISP, and WIMAX
- Vertical polarization
- Omnidirectional gain patterns
- RoHS-compliant

### APPLICATIONS

- LTE
- GSM 850/900
- GSM 1800/1900
- UMTS/WCMDA (3G)
- 802.11 b/g/n WLAN applications
- Bluetooth<sup>®</sup> devices

#### ELECTRICAL SPECIFICATIONS

Antenna Model		MTRA61274Cx2								
Number of Ports		2 (2 ports LTE)								
Operating Frequency (MHz)	617-698	698-824	824-894	880-960	1350-1550	1690-1880	1850-1990	1910-2180	2300-2500	2500-270
Peak Gain – Average (dBi)**	2.4	3.1	2.8	2.7	2.7	3.6	3.9	3.5	3.6	2.9
Peak Gain – Max (dBi)**	3.2	4.0	4.0	3.4	4.7	4.1	4.1	4.2	4.0	3.4
VSWR – Max*		2.5								
VSWR – Average*										
Port 1	1.4	1.8	1.9	1.9	1.5	1.3	1.4	1.8	1.8	1.9
Port 2	1.4	1.8	1.9	1.9	1.5	1.3	1.4	1.8	1.8	1.8
Port-to-Port Isolation LET1-to-LTE2	-8	-10	-10	-10	-15	-17	-18	-18	-18	-25
Nominal Impedance (Ohms)		50								
Polarization		Linear vertical								
Azimuth Beamwidth (°)		360, Omnidirectional								
Max Power - Ambient 25°C (W)		50								

\*/\*\* - Measured on a one-foot ground plane.

MECHANICAL SPECIFICATIONS	
Dimensions – L x W x H – mm (inches)	130 x 84 x 95 (5.12 x 3.31 x 3.74)
Weight – g (oz.)	343 (12.1)
Radome/Baseplate Material	PC, UL94 V0 Rating, UV Stable

ENVIRONMENTAL SPECIFICATIONS	
Operating Temperature – °C (°F)	-30 to +70°C (-22 to +158°F)
Storage Temperature – °C (°F)	-40 to +85°C (-40 to +185°F)
Material Substance Compliance	RoHS
Ingress Protection	IP67 (when installed on a hard, flat surface)



## MTRA61274Cx2 M2M LTE MIMO Antenna

#### CONFIGURATION

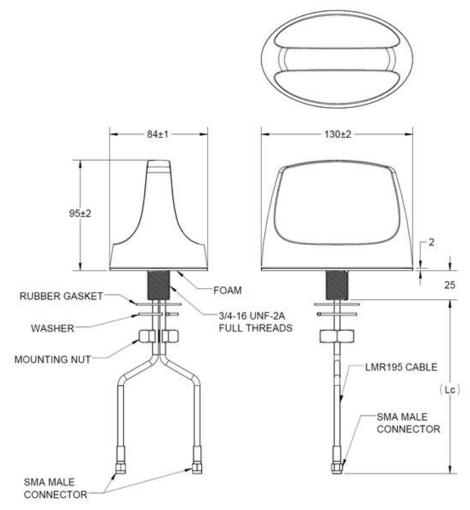
PART NUMBER	CABLE TYPE	CABLE LENGTH	CONNECTOR	COLOR
MTRA61274CB2-001	LMR195M	610 mm (24 in.)	SMA- male	Black
MTRA61274CW2-001	LMR195M	610 mm (24 in.)	SMA- male	White

Note: Specifications vary with different types of cable, different lengths of cables and connectors. Contact Laird for detailed specifications.

#### PACKAGING INFORMATION

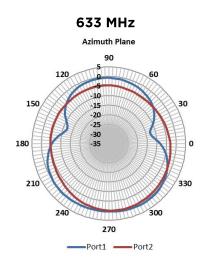
PACKAGED DIMENSIONS	MASTER CARTON	AIR PALLET	OCEAN PALLET
Number of Antennas	20	480	600
Height – cm (in.)	30.0 (11.8)	135 (53.2)	165 (65.0)
Length – cm (in.)	52.5 (20.7)	105 (41.3)	105 (41.3)
Width – cm (in.)	26.5 (10.4)	79.5 (31.3)	79.5 (31.3)
Shipping Weight – kg (lbs.)	7.36 (16.2)	190 (419)	230 (507)

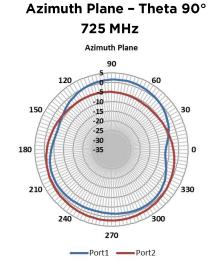
#### MECHANICAL DRAWING

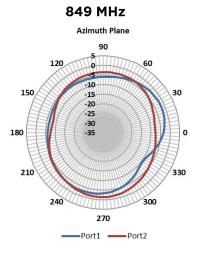




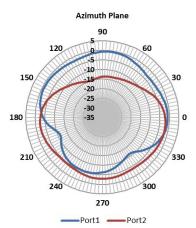
#### **RADIATION PATTERNS**



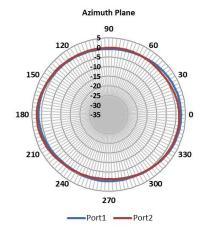




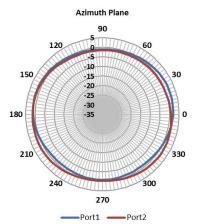
925 MHz



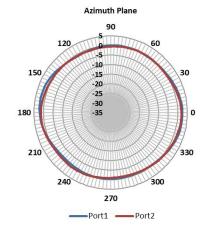
1930 MHz



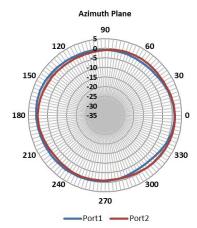
1730 MHz



2300 MHz

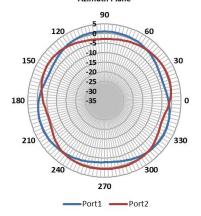


2140 MHz



2595 MHz

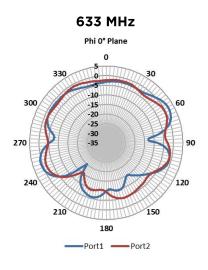


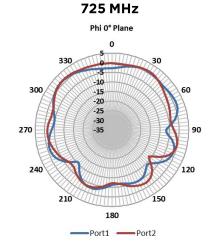


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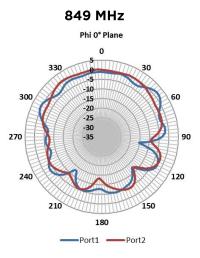
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#### **RADIATION PATTERNS**

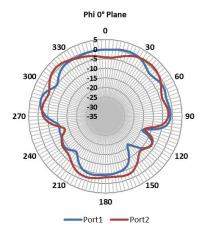




Elevation Plane 0° - Phi 0°

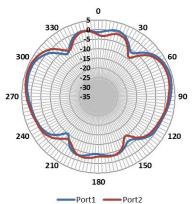


925 MHz

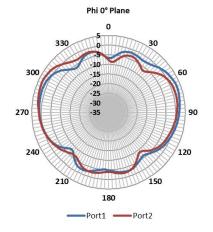


1930 MHz

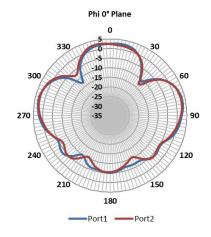
Phi 0° Plane



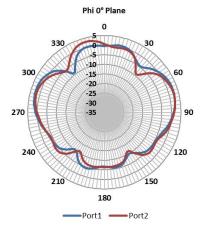
1730 MHz



2300 MHz

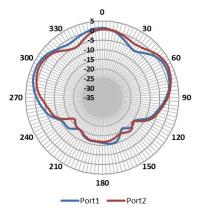


2140 MHz



2595 MHz

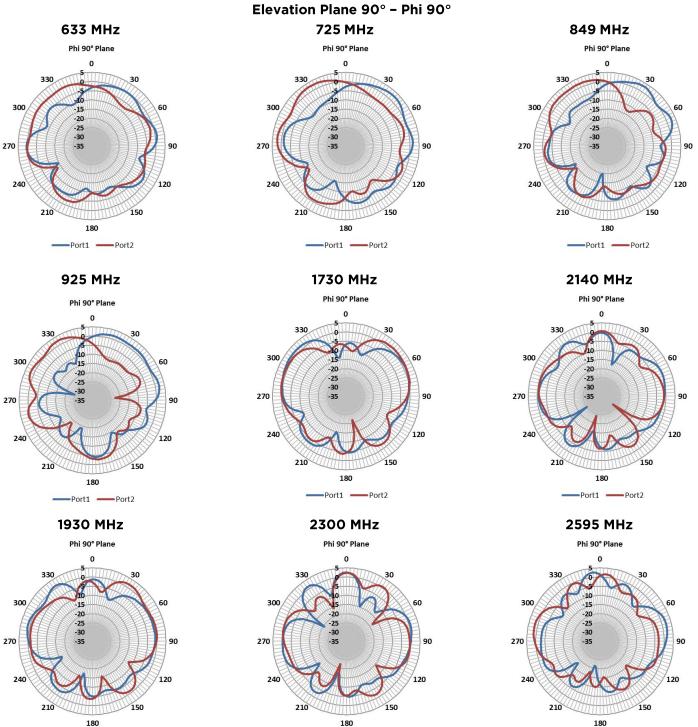
Phi 0° Plane





## MTRA61274Cx2 M2M LTE MIMO Antenna





-Port1 -Port2

#### RoHS

-Port1 -Port2

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Port1 — Port2

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