



Smart Technology. Delivered.



# CMD69273P

## 698to960MHz/1710to2700MHz

### Low PIM 2-port MIMO Ceiling Mount Antenna

#### LOW PIM 2-PORT MIMO MULTI-BAND CEILING MOUNTED OMNIDIRECTIONAL ANTENNA

The CMD69273P utilizing Patent Pending Technology is an indoor broadband low PIM 2-port MIMO omnidirectional ceiling mount antenna. It is designed to provide pattern coverage optimized for indoor requirements at 698-960MHz and 1710-2700MHz frequency bands. The individual antenna elements are designed with linear H/V-polarization components oriented to radiate a pattern that has been specifically shaped to deliver optimal performance from a ceiling mount location.

#### FEATURES

- Low Profile aesthetically neutral housing
- Mounts directly and easily to ceiling tile
- Wide bandwidth 700/850/900/1800/1900/UMTS/2300/2400/2500
- Two radiating elements optimized for indoor MIMO Applications
- Low cross correlation between radiating elements
- Low Passive Intermodulation
- Conformance to RoHS
- Antenna w/cables Plenum rated

#### MARKETS

- Cellular
- LTE/WiMAX
- 802.11 a/b/g/n
- Warehouse, Office and Meeting Rooms
- Hotels, Museums, Libraries, Retail Malls
- Airport, Bus Terminals and Train Stations
- Other in-building areas

#### BENEFITS

- Complete cellular and 3G/4G data communications in a single antenna
- Radiating elements are oriented to provide maximum coverage
- To mitigate the multi path polarization propagation issue, each radiating element is designed to have dual-linear H/V polarization characteristics
- Full Plenum rating allows for above ceiling installations.

PARAMETER	SPECIFICATIONS								
Frequency Bands, MHz	698-806	824-894	880-960	1710-1880	1850-1990	1910-2170	2300-2500	2500-2700	
Peak Gain, dBi (Typ)		3.1	3.1	2.8	5.9	4.5	4.3	5.9	6.9
Peak Gain, dBi (Max)		3.9	3.8	3.5	6.8	5.1	4.7	6.3	7.4
VSWR (Typ)		<1.7:1	<1.7:1	<1.7:1	<1.8:1	<1.7:1	<1.7:1	<1.5:1	<1.5:1
Isolation, dB (Typ)		<-20	<-22	<-18	<-26	<-25	<-22	<-20	<-20
PIM, 3 <sup>rd</sup> Order, 2 x20W (Typ)		<-154 dBc			<-155 dBc				
PIM, 3 <sup>rd</sup> Order, 2 x20W (Max)					<-150 dBc				
Maximum VSWR					2.0:1				
Nominal Impedance					-50 Ω				
Max Power (Ambient temp of 25°C)					50 Watts				
Polarization					Linear H/V for each Radiator				
Azimuth Beam Width					Omnidirectional				
Radome					PC/ABS, UV stable				
Mounting					Ceiling mount (flush mount with screws and anchors)				
Dimensions (diameter x height)					218.7 mm x 43.5 mm				
Weight					0.41 kg				
Storage Temperature (°C)					-40°C to +85°C				
Operational Temperature (°C)					-30°C to +70°C				
Plenum Rating Compliance*					ANSI/UL60950-1, UL 2043, IEC 60950-1				
Flammability Rating (Radome)					UL94V0 Materials				
Material Substance Compliance					RoHS Compliant				

\*Antenna, with cables, fully Plenum compliant.

#### CONNECTORS

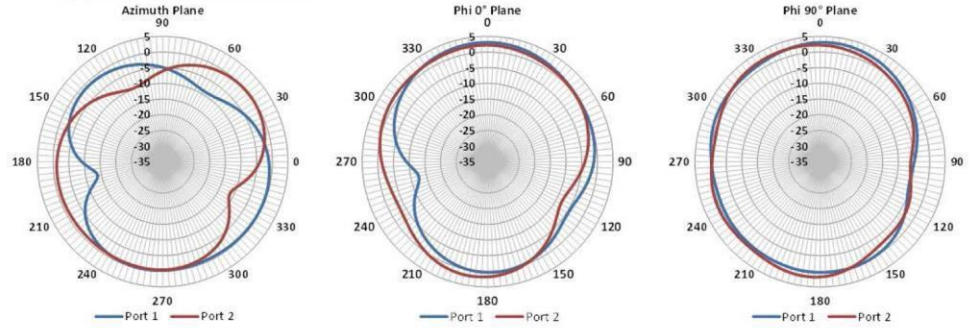
MODEL NUMBER	CABLE LENGTH*	CONNECTOR
CMD69273P-FNF	NA (Direct Connect)	Dual Type N-Female
CMD69273P-30NF	Dual 30 cm (12")	Dual Type N-Female
CMD69273P-46NF	Dual 46 cm (18")	Dual Type N-Female
CMD69273P-30D41F	Dual 30 cm (12")	Dual 4.1-9.5 Mini DIN Female

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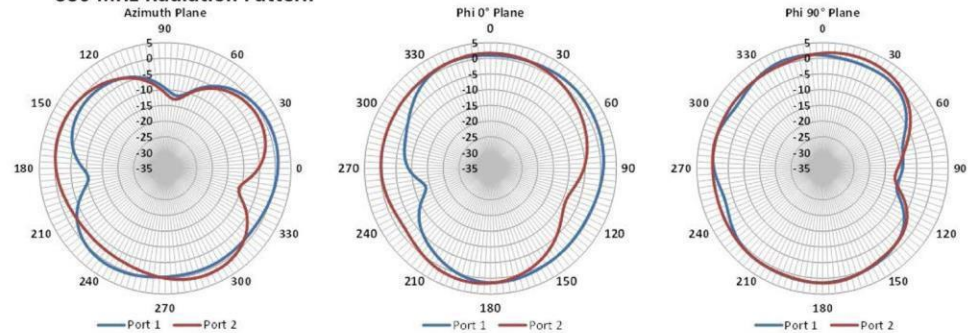
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#### PATTERNS

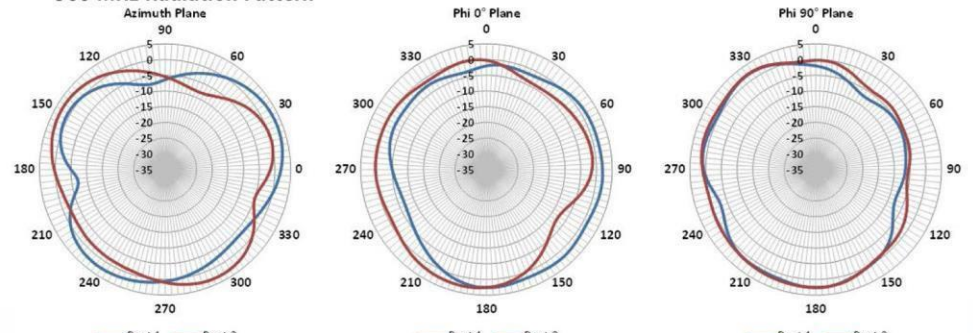
**698 MHz Radiation Pattern**



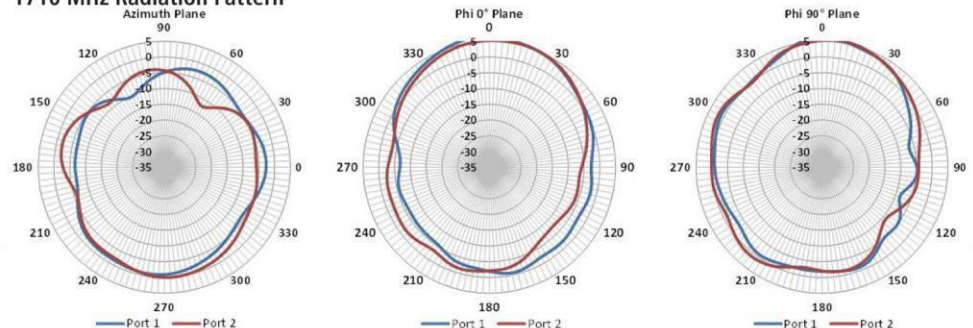
**880 MHz Radiation Pattern**



**960 MHz Radiation Pattern**



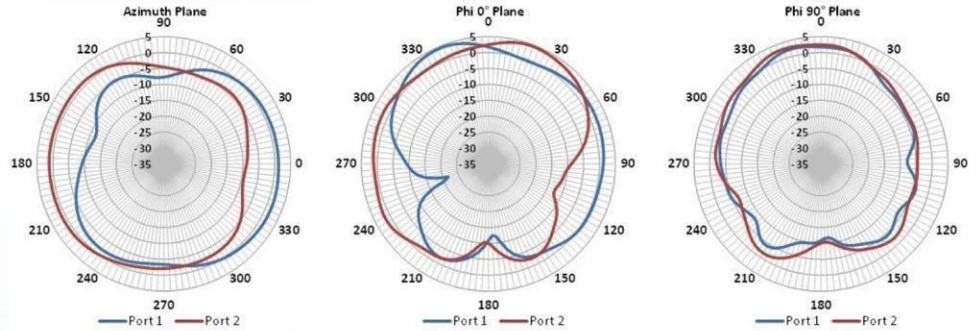
**1710 MHz Radiation Pattern**



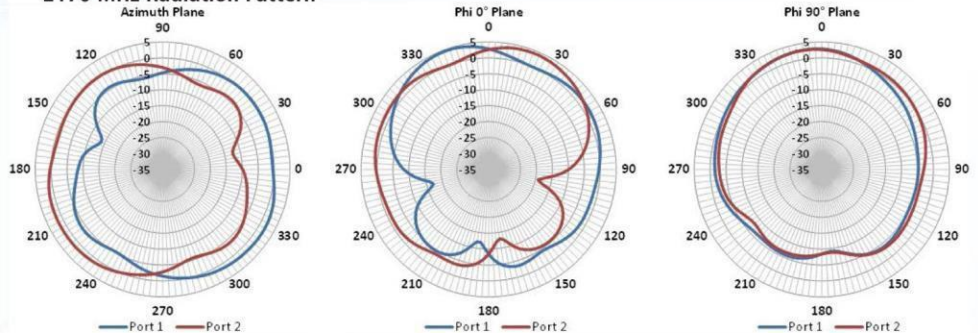
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#### PATTERNS

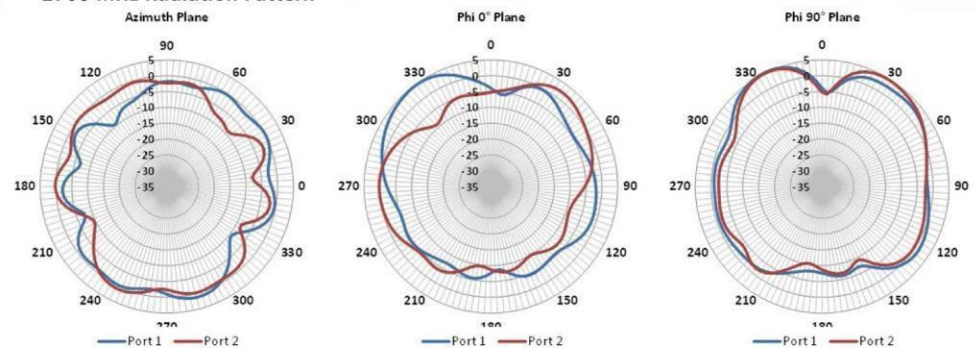
1950 MHz Radiation Pattern



2170 MHz Radiation Pattern



2700 MHz Radiation Pattern



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