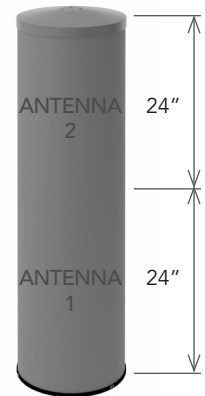


C2U3MD120X12FwxyS0

Features

- Broad-Beam 120° heart-shape configuration with 12 connectors
- Dual antennas integrated under a single radome
- Ideal for multi-carrier or 4x4 MIMO deployments
- 5 GHz U-NII FCC compliant
- Available for order with a grey, brown or black radome



PRODUCT OVERVIEW	Frequency Range (MHz)	LOW BAND	MID BAND		CBRS BAND		LAA BAND
		(1x) 696-960	(2x) 1695-2700		(2x) 3550-3700		(1x) 5150-5925
	Array	<div><div></div> R1</div>	<div><div></div> Y1</div>	<div><div></div> Y2</div>	<div><div></div> P1</div>	<div><div></div> P2</div>	<div><div></div> O1</div>
	Connector	2 PORTS	4 PORTS		4 PORTS		2 PORTS
	Polarization	XPOL	XPOL		XPOL		XPOL
	Azimuth Beamwidth (avg)	202°	187°		169°		206°
	Electrical Downtilt	0°, 5°	2°, 6°		0°		0°
	Configuration	HEART-SHAPE CONFIGURATION					
	Connector Type	(12x) 4.3-10 FEMALE CONNECTORS					
	Dimensions	1219 x Ø371 mm (48.0 x Ø14.6 in)					
	Radome Color Options	GREY, BROWN or BLACK					

ELECTRICAL SPECIFICATIONS Low Band

■ R1

Frequency Range		MHz	(1x) 696-960	
Frequency Sub-Range		MHz	696-806	806-960
Polarization		---	(1x) ±45°	
Gain	BASTA	dBi	9.5 ± 0.6	10.1 ± 0.8
	MAX	dBi	10.1	10.9
Azimuth Beamwidth (3 dB)		degrees	206.1° ± 9.5°	196.9° ± 11.9°
Elevation Beamwidth (3 dB)		degrees	23.7° ± 1.7°	20.9° ± 2.2°
Electrical Downtilt		degrees	(w) 0°, 5°	
Impedance		Ohms	50Ω	
VSWR		---	≤ 1.5:1	
Passive Intermodulation 3rd Order for 2x20 W Carriers		dBc	< -153	
Upper Sidelobe Suppression		dB	> 12 dB	
Isolation	Intraband	dB	> 25	
	Interband	dB	> 28	
Input Power		Watts	500W	

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ELECTRICAL SPECIFICATIONS Mid Band

■ Y1 ■ Y2

Frequency Range		MHz	(2x) 1695-2700			
Frequency Sub-Range		MHz	1695-1880	1850-1990	1920-2200	2300-2700
Polarization		---	(2x) ±45°			
Gain	BASTA	dBi	10.5 ± 0.6	10.8 ± 0.5	10.8 ± 0.5	11.0 ± 1.0
	MAX	dBi	11.1	11.3	11.3	12.0
Azimuth Beamwidth (3 dB)		degrees	185.9° ± 12.2°	189.3° ± 13.9°	188.1° ± 13.8°	185.4° ± 22.6°
Elevation Beamwidth (3 dB)		degrees	20.3° ± 2.3°	19.1° ± 2.5°	18.1° ± 2.6°	16.9° ± 4.4°
Electrical Downtilt		degrees	(x) 2°, 6°			
Impedance		Ohms	50Ω			
VSWR		---	≤ 1.5:1			
Passive Intermodulation 3rd Order for 2x20 W Carriers		dBc	< -153			
Upper Sidelobe Suppression		dB	> 11			
Isolation	Intraband	dB	> 25			
	Interband	dB	> 28			
Input Power		Watts	300W			

ELECTRICAL SPECIFICATIONS CBRS Band

■ P1 ■ P2

Frequency Range		MHz	(2x) 3550-3700
Polarization		---	(2x) ±45°
Gain	BASTA	dBi	6.2 ± 0.6
	MAX	dBi	6.8
Azimuth Beamwidth (3 dB)		degrees	168.8° ± 16.6°
Elevation Beamwidth (3 dB)		degrees	37.3° ± 10.8°
Electrical Downtilt		degrees	(y) 0°
Impedance		Ohms	50Ω
VSWR		---	≤ 1.5:1
Passive Intermodulation 3rd Order for 2x20 W Carriers		dBc	N/A
Upper Sidelobe Suppression		dB	N/A
Isolation	Intraband	dB	> 25
	Interband	dB	> 28
Input Power		Watts	100W

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ELECTRICAL SPECIFICATIONS LAA Band

■ O1

Frequency Range		MHz	(1x) 5150-5925
Polarization		---	(1x) ±45°
Gain	BASTA	dBi	5.0 ± 0.6
	MAX	dBi	5.6
Azimuth Beamwidth (3 dB)		degrees	205.7° ± 39.3°
Elevation Beamwidth (3 dB)		degrees	22.4° ± 6.1°
Electrical Downtilt		degrees	(y) 0°
Impedance		Ohms	50Ω
VSWR		---	≤ 1.5:1
Passive Intermodulation 3rd Order for 2x20 W Carriers		dBc	N/A
Upper Sidelobe Suppression		dB	N/A
Isolation	Intraband	dB	> 25
	Interband	dB	> 28
Input Power		Watts	50W
U-NII Compliant		---	Yes

MECHANICAL SPECIFICATIONS

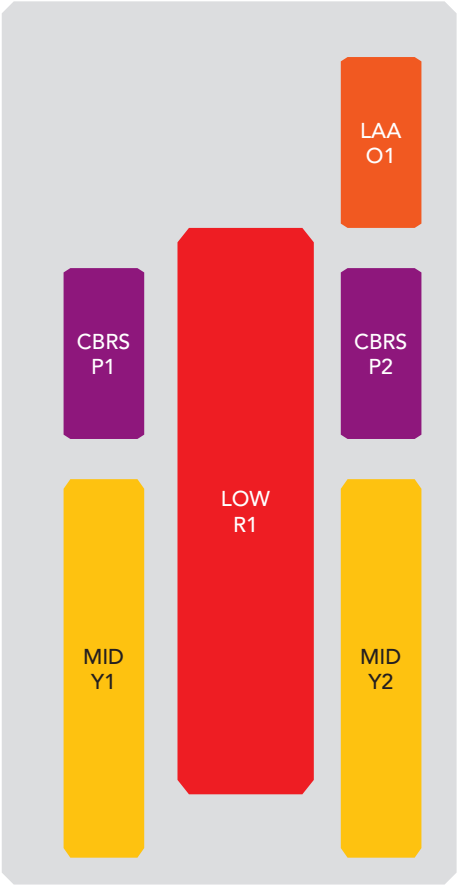
Antenna	Height	mm (in)	1219 (48.0)
	Diameter	mm (in)	371 (14.6)
Net Weight - Antenna Only		kg (lbs)	16.4 (36.2)
Windload	Calculation	km/h (mph)	160 (100)
	Frontal	N (lbf)	391 (88)
Survival Wind Speed		km/h (mph)	241 (150)
Wind Area		m ² (ft ²)	0.13 (4.7)
Volume	Total	m ³ (ft ³)	0.13 (4.7)
	Each Antenna	m ³ (ft ³)	0.065 (2.33)
Connector	Type	---	4.3-10 Female
	Quantity	---	12
	Position	---	Bottom
Radome Color		---	Grey (Pantone 420 C), Brown (Pantone 476 C), Black (RAL 9011)
Lightning Protection (Grounding Type)		---	Direct Ground

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C2U3MD120X12Fwxyso

ARRAY LAYOUT Topology

FREQUENCY		ARRAY	CONNECTOR	CONNECTOR TYPE
LOW BAND	696-960	■ R1	1-2	(2x) 4.3-10 Female
MID BAND	1695-2700	■ Y1	3-4	(2x) 4.3-10 Female
	1695-2700	■ Y2	5-6	(2x) 4.3-10 Female
CBRS BAND	3550-3700	■ P1	7-8	(2x) 4.3-10 Female
	3550-3700	■ P2	9-10	(2x) 4.3-10 Female
LAA BAND	5150-5925	■ O1	11-12	(2x) 4.3-10 Female



The illustration is not shown to scale.

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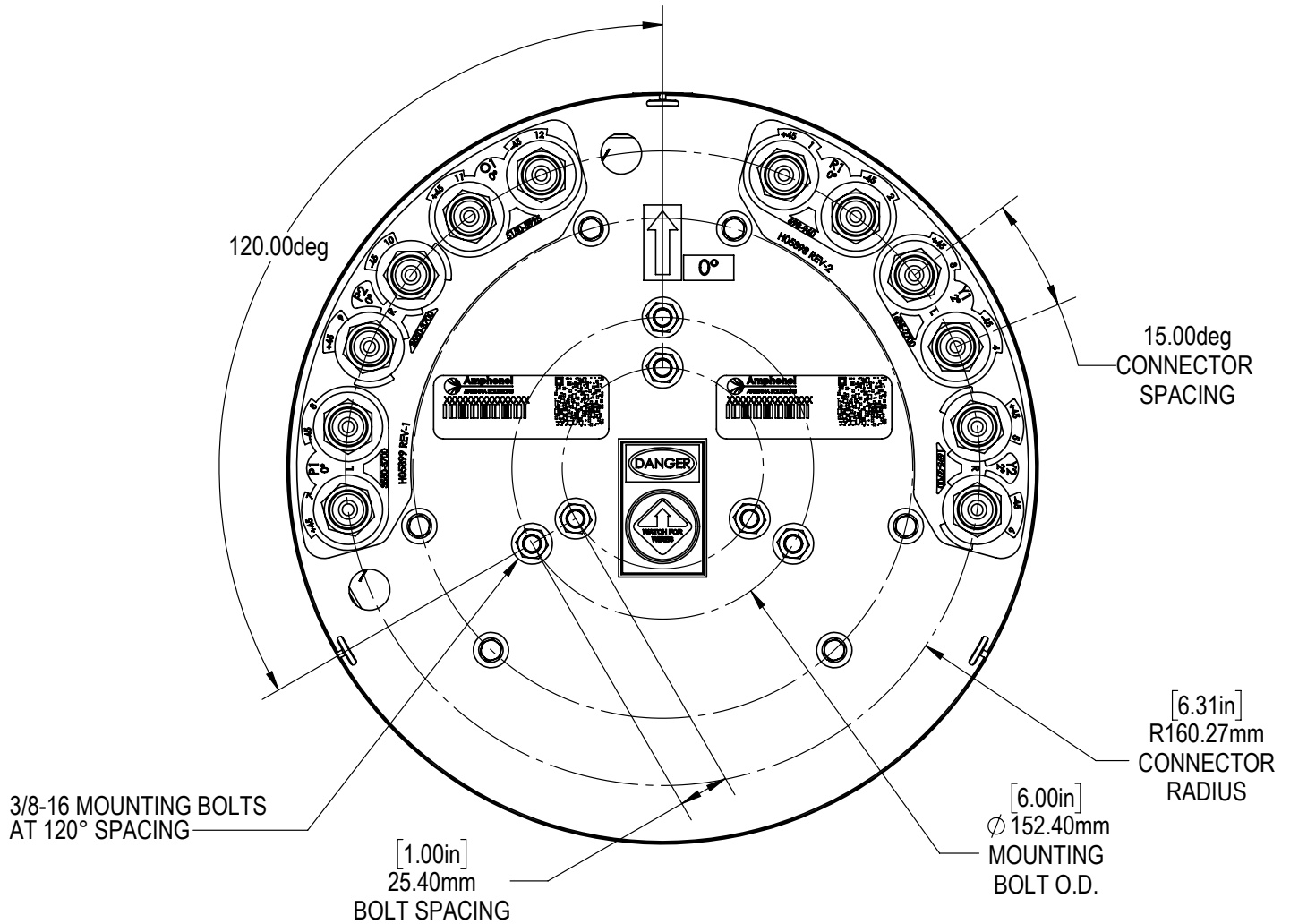
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BOTTOM VIEW - LABELING



C2U3MD120X12FwxyS0

BOTTOM VIEW - CONNECTOR DIAGRAM



INSTALLATION Please read all installation notes before installing this product.



Always attach the antenna using all mounting points.

Do not install the antenna with the connectors facing upwards.

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C2U3MD120X12Fwxy^s0

MOUNTING KITS Select from the following mounting options when ordering. Mounting kits for canister antennas are ordered as a separate line item.

MODEL NUMBER		DESCRIPTION
CWT-MKS-SIDE		SIDE MOUNTING BRACKET KIT FOR CANISTER ANTENNA
CWT-MKS-TOP		TOP MOUNTING BRACKET KIT FOR CANISTER ANTENNA
WB3X-MKS-01		UTILITY POLE MOUNTING BRACKET KIT FOR CANISTER ANTENNA
CWT-MKS-BASE-xx		WIDE DIAMETER POLE TOP MOUNTING BRACKET KIT FOR CANISTER ANTENNA. AVAILABLE IN BROWN, BLACK AND GREY TO MATCH ANTENNA RADOME AND/OR MOUNTING STRUCTURE.

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HOW TO READ THE MODEL NUMBER Each letter and number has meaning.

NUMBER OF BANDS and OPERATING FREQUENCY				PATTERN TYPE	AZIMUTH BMWIDTH	POLARIZATION	LENGTH	TILT TYPE	TILT OPTIONS	CONNECTOR TYPE	VARIATION	RADOME COLOR OPTIONS
C	2U	3M		D	120	X	12	F	wxy	s	0	BK BR
(1x) 696-960	(2x) 1695-2700	(2x) 3550-3700	(1x) 5150-5925	Dual Sector	~120° Heart-Shape	XPOL	1.2 meters	Fixed Tilt	These letters are placeholders for fixed tilt options. Refer to Electrical Specifications for available tilt options.	4.3-10 Connector	Original Design	BK indicates a Black radome. BR indicates a Brown radome. The default radome color is Grey. No letters are required for a Grey radome.

ORDERING OPTIONS Select from the following ordering options

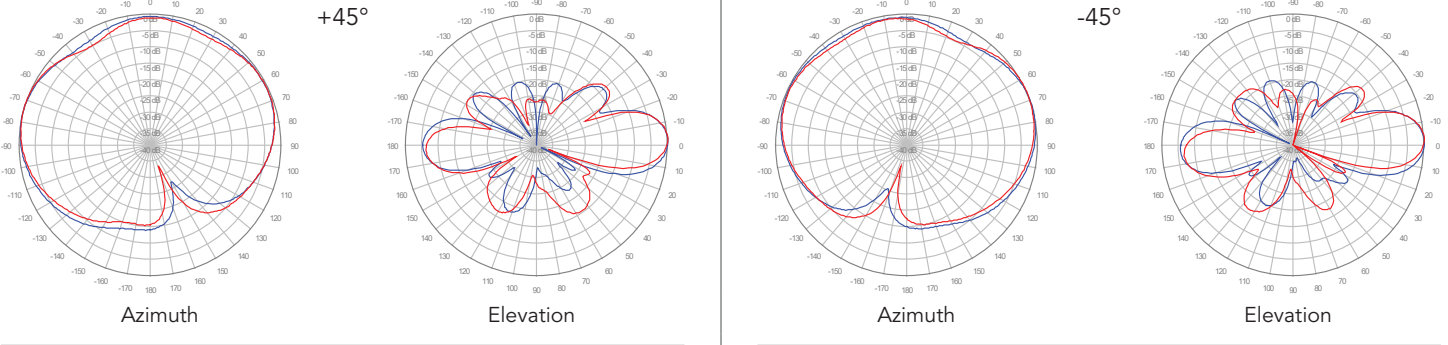
SELECT RADOME COLOR	SELECT DEGREE OF ELECTRICAL DOWNTILT FOR EACH BAND				ORDER MODEL NUMBER
	LOW BAND	MID BAND	CBRS BAND	LAA BAND	
Grey Pantone 420 C	0°	2°	0°	0°	C2U3MD120X12F020s0
	0°	6°	0°	0°	C2U3MD120X12F060s0
	5°	2°	0°	0°	C2U3MD120X12F520s0
	5°	6°	0°	0°	C2U3MD120X12F560s0
Brown Pantone 476 C	0°	2°	0°	0°	C2U3MD120X12F020s0BR
	0°	6°	0°	0°	C2U3MD120X12F060s0BR
	5°	2°	0°	0°	C2U3MD120X12F520s0BR
	5°	6°	0°	0°	C2U3MD120X12F560s0BR
Black RAL 9011	0°	2°	0°	0°	C2U3MD120X12F020s0BK
	0°	6°	0°	0°	C2U3MD120X12F060s0BK
	5°	2°	0°	0°	C2U3MD120X12F520s0BK
	5°	6°	0°	0°	C2U3MD120X12F560s0BK

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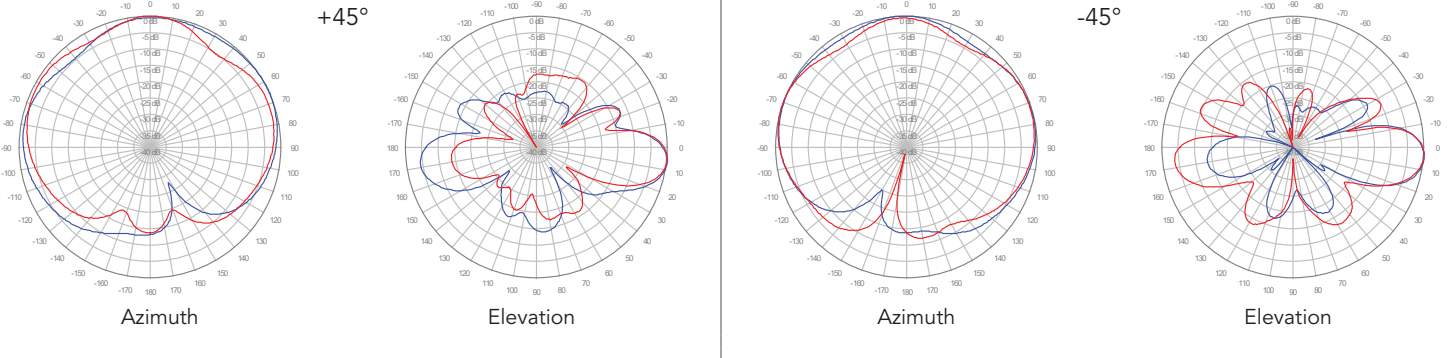
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750 MHz —————
850 MHz —————

■ R1, 0° TILT



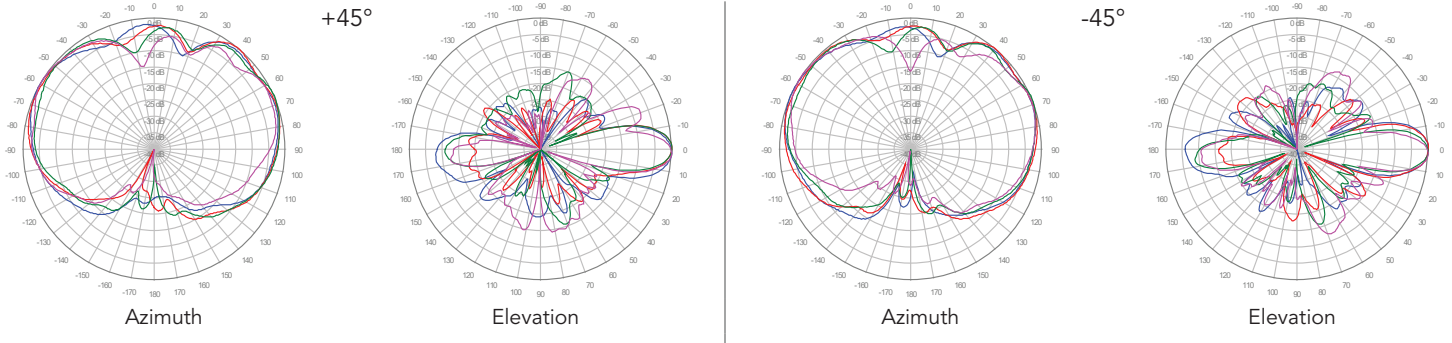
■ R1, 5° TILT



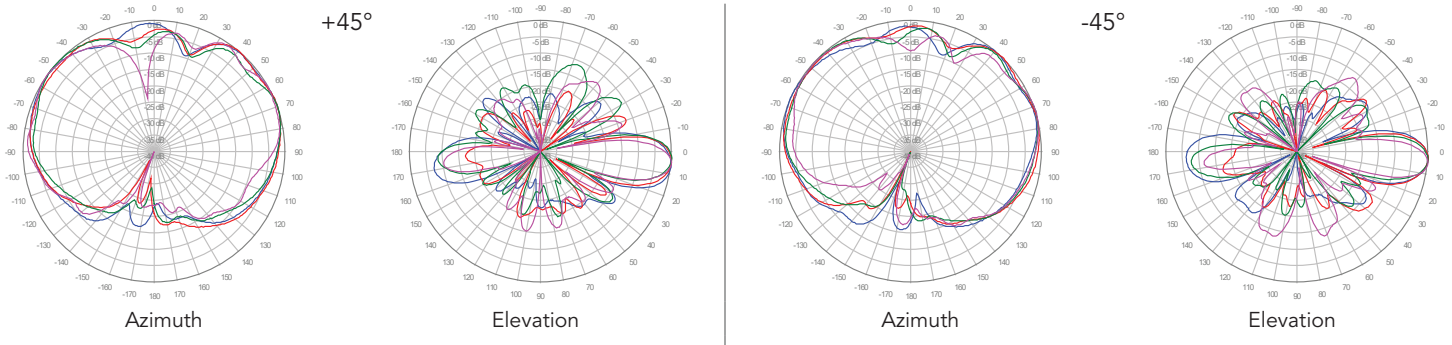
C2U3MD120X12Fwxys0

1800 MHz ———
1900 MHz ———
2100 MHz ———
2600 MHz ———

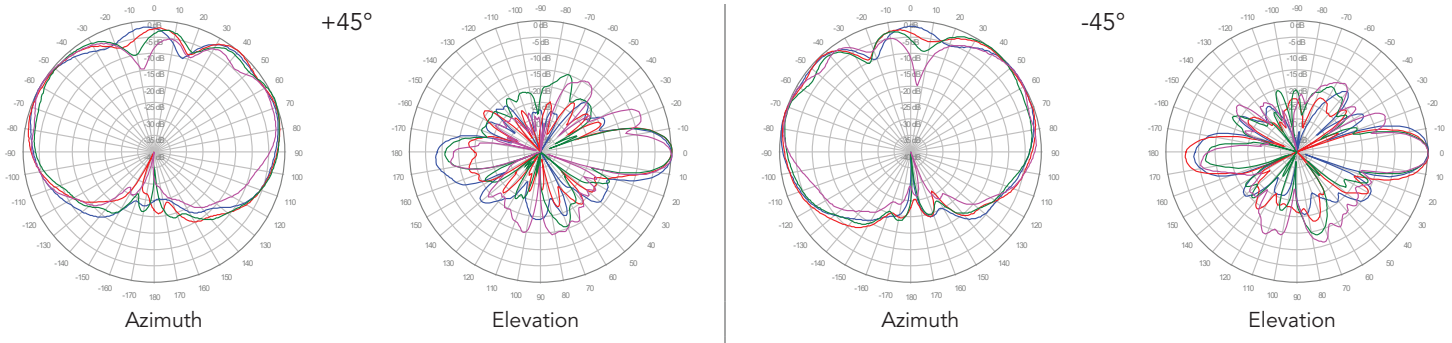
Y1, 2° TILT



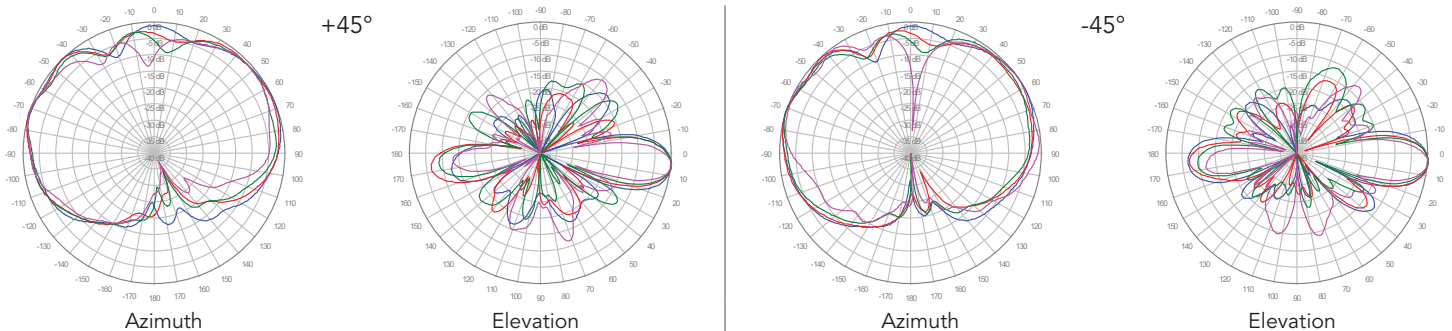
Y1, 6° TILT



Y2, 2° TILT



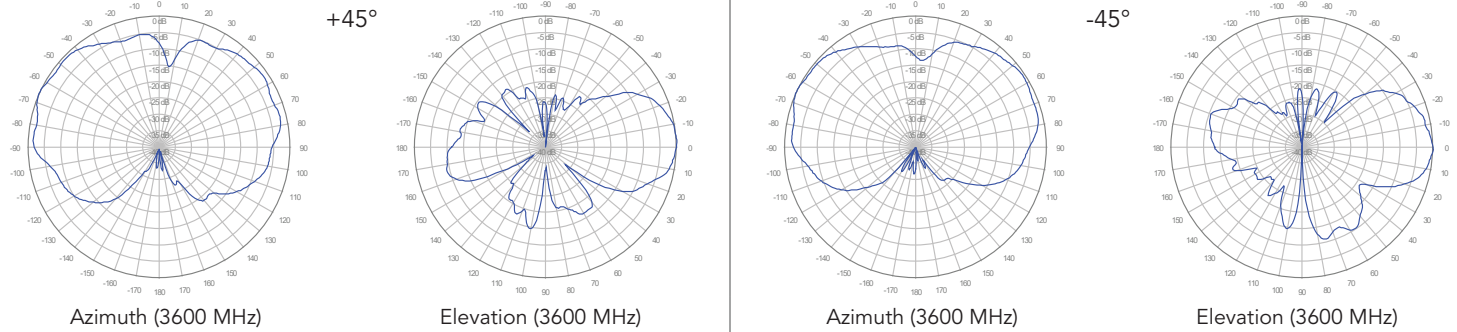
Y2, 6° TILT



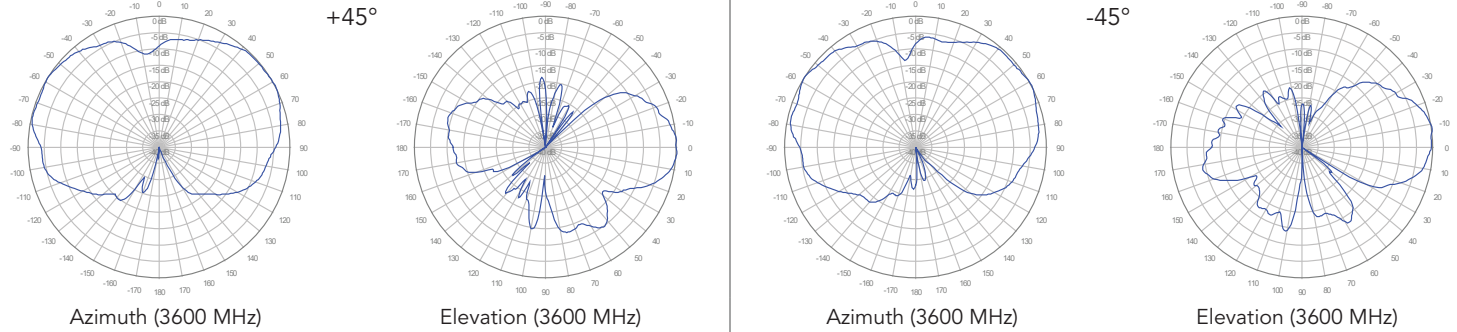
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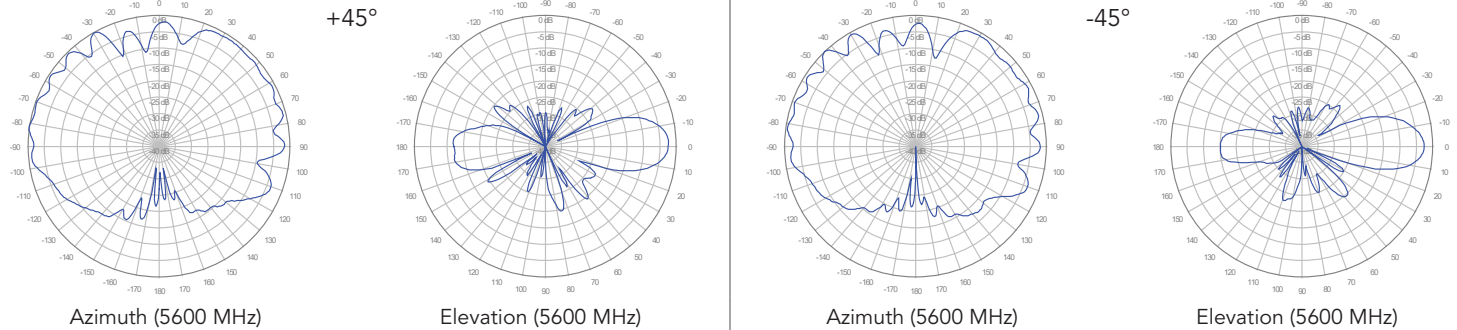
P1, 0° TILT



P2, 0° TILT



O1, 0° TILT



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