Amphenol ANTENNA SOLUTIONS

32-Port Canister Antenna

(8x) 1695-2700 | (8x) 3300-4200 MHz

SECTOR / OMNI COMBINATION | 23.9 IN | FIXED TILT

4U4VTSP1X06Fxys5

Features

- Sector & omni configuration with 32 connectors
- 4x4 MIMO capable in both omni and tri-sectored configurations at 1695-2700 and 3300-4200 MMHz
- Broadband networks 1695-2700 and 3300-4200 MHz
- Improvements in gain, port isolation and VSWR
- Easily removable lifting ring

PRODUCT OVERVIEW					
Frequency Range (MHz)	(8x) 1695-2700		(8x) 3300-4200		
Array	Y1 Y2 Y3 Y4 Y5 Y6	Y7 Y8	P1 P2 P3 P4 P5 P6	P7 P8	
Connector	12 PORTS	4 PORTS	12 PORTS	4 PORTS	
Polarization	XPOL	XPOL	XPOL	XPOL	
Azimuth Beamwidth (avg)	SECTORIZED	OMNI	SECTORIZED	OMNI	
Electrical Downtilt	0°, 2°, 4°, 6°		0°, 2°, 4°, 6°		
Configuration	SECTOR & OMNI COMBINATION				
Maximum Continuous Power Per Port @ 50° C (122° F)	200 WATTS		100 WATTS		
Maximum Total Continuous Power at 50° C (122° F)	4800 WATTS				
Connector Type	(32x) 4.3-10 FEMALE				
Dimensions	608 x Ø371 mm (23.9 x Ø14.6 in)				
Radome Color Options	GREY, BROWN or BLACK				

ELECTRICAL SPECIFICATIONS Sectorized — Y1 Y2 Y3 Y4 Y5 Y6

Frequency Range		MHz	(6x) 1695-2700			
Frequency Sub-Range		MHz	1695-1880	1850-1990	1920-2200	2300-2700
Polarization		---	(6x) ±45°			
Gain	BASTA	dBi	11.6 ± 0.84	11.66 ± 1.02	11.67 ± 1.28	12.33 ± 0.87
	MAX	dBi	12.44	12.68	12.95	13.20
Azimuth Beamwidth (3 dB)		degrees	63.3° ± 6.4°	62.3° ± 8.4°	67.7° ± 13.7°	73.6° ± 10.1°
Elevation Beamwidth (3 dB)		degrees	29.3° ± 4.0°	27.5° ± 2.5°	26.2° ± 2.5°	22.3° ± 2.9°
Electrical Downtilt		degrees	(x) 0°, 2°, 4°, 6°			
Impedance		Ohms	50Ω			
VSWR		---	1.5:1			
Passive Intermodulation 3rd Order for 2x20 W Carriers		dBc	-153			
Upper Sidelobe Suppression		dB	N/A	N/A	N/A	N/A
Isolation	Intraband	dB	25			
	Interband	dB	28			

Quoted performance parameters are provided to offer typical, peak or range values only and may vary as a result of normal testing, manufacturing and operational conditions. Extreme operational conditions and/or stress on structural supports is beyond our control. Such conditions may result in damage to this product. Improvements to products may be made without notice.

4U4VTSP1X06Fxys5

ELECTRICAL SPECIFICATIONS Omni

■ Y7 ■ Y8

Frequency Range		MHz	(2x) 1695-2700			
Frequency Sub-Range		MHz	1695-1880	1850-1990	1920-2200	2300-2700
Polarization		---	(2x) ±45°			
Gain	BASTA	dBi	7.79 ± 1.40	9.08 ± 1.13	9.72 ± 1.53	9.83 ± 1.15
	MAX	dBi	9.19	10.21	11.25	10.98
Azimuth Beamwidth (3 dB)		degrees	360°	360°	360°	360°
Elevation Beamwidth (3 dB)		degrees	19.2° ± 2.2°	17.4° ± 1.8°	16.8° ± 1.6°	14.3° ± 1.3°
Electrical Downtilt		degrees	(x) 0°, 2°, 4°, 6°			
Impedance		Ohms	50Ω			
VSWR		---	1.5:1			
Passive Intermodulation 3rd Order for 2x20 W Carriers		dBc	-153			
Upper Sidelobe Suppression		dB	N/A	N/A	N/A	N/A
Isolation	Intraband	dB	25			
	Interband	dB	28			

ELECTRICAL SPECIFICATIONS Sectorized

■ P1 ■ P2 ■ P3 ■ P4 ■ P5 ■ P6

Frequency Range		MHz	(6x) 3300-4200		
Frequency Sub-Range		MHz	3300-3550	3550-3700	3700-4200
Polarization		---	(6x) ±45°		
Gain	BASTA	dBi	13.88 ± 0.48	14.27 ± 0.71	15.1 ± 1.86
	MAX	dBi	14.36	14.98	16.96
Azimuth Beamwidth (3 dB)		degrees	60.2° ± 2.6°	56.1° ± 4.1°	54.5° ± 3.9°
Elevation Beamwidth (3 dB)		degrees	17.6° ± 0.8°	17.0° ± 0.8°	15.9° ± 1.1°
Electrical Downtilt		degrees	(y) 0°, 2°, 4°, 6°		
Impedance		Ohms	50Ω		
VSWR		---	1.5:1		
Passive Intermodulation 3rd Order for 2x20 W Carriers		dBc	-153		
Upper Sidelobe Suppression		dB	N/A		
Isolation	Intraband	dB	25		
	Interband	dB	28		

4U4VTSP1X06Fxys5

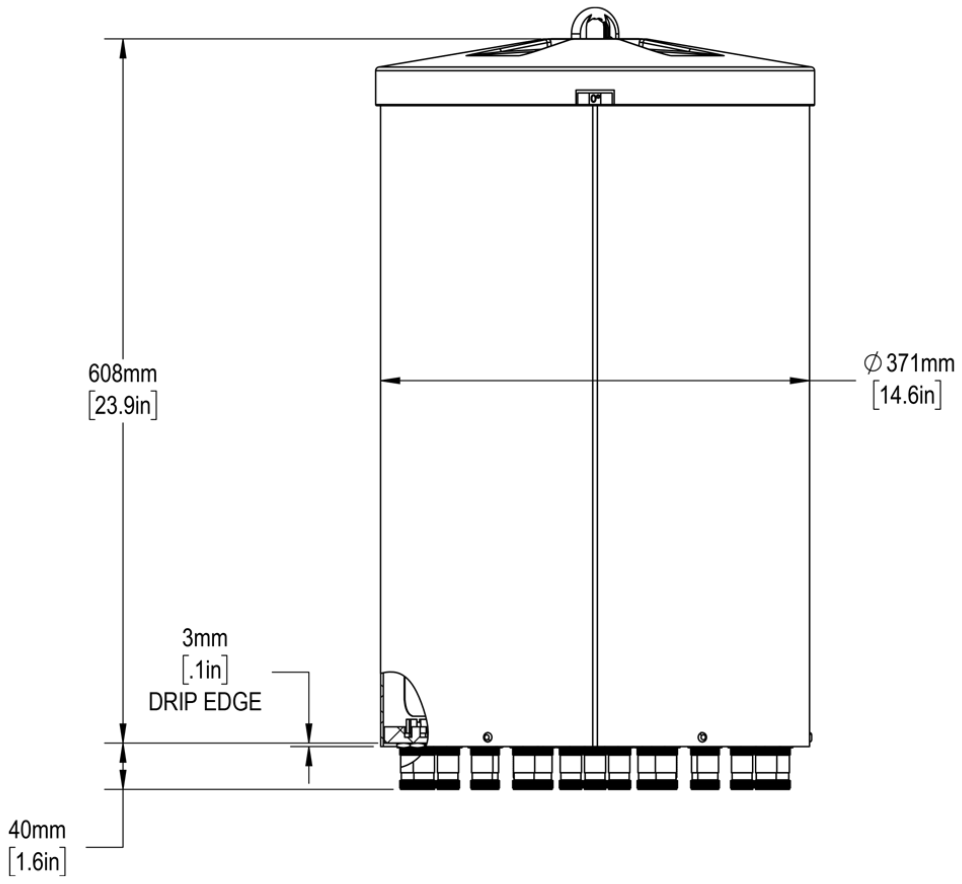
ELECTRICAL SPECIFICATIONS Omni ■ **P7** ■ **P8**

Frequency Range		MHz	(2x) 3300-4200		
Frequency Sub-Range		MHz	3300-3550	3550-3700	3700-4200
Polarization		---	(2x) ±45°		
Gain	BASTA	dBi	11.02 ± 0.69	11.06 ± 0.72	11.73 ± 0.72
	MAX	dBi	11.71	11.78	12.45
Azimuth Beamwidth (3 dB)		degrees	360°	360°	360°
Elevation Beamwidth (3 dB)		degrees	7.7° ± 0.4°	7.5° ± 0.4°	7.2° ± 0.4°
Electrical Downtilt		degrees	(y) 0°, 2°, 4°, 6°		
Impedance		Ohms	50Ω		
VSWR		---	1.5:1		
Passive Intermodulation 3rd Order for 2x20 W Carriers		dBc	-153		
Upper Sidelobe Suppression		dB	N/A		
Isolation	Intraband	dB	25		
	Interband	dB	28		

4U4VTSP1X06Fxys5

MECHANICAL SPECIFICATIONS

Antenna	Height		mm (in)	608 (23.9)
	Diameter		mm (in)	371 (14.6)
Net Weight - Antenna Only			kg (lbs)	14.1 (31)
Windload		Calculation	km/h (mph)	160 (100)
		Frontal	N (lbf)	191 (43)
Survival Wind Speed			km/h (mph)	241 (150)
Wind Area			m^2 (ft^2)	0.22 (2.4)
Volume			m^3 (ft^3)	0.07 (2.3)
Connector		Type	---	(32x) 4.3-10 Female
		Position	---	Bottom
Radome Color			---	Grey (Pantone 420 C), Brown (Pantone 476 C), Black (RAL 9011)
Lightning Protection (Grounding Type)			---	Direct Ground

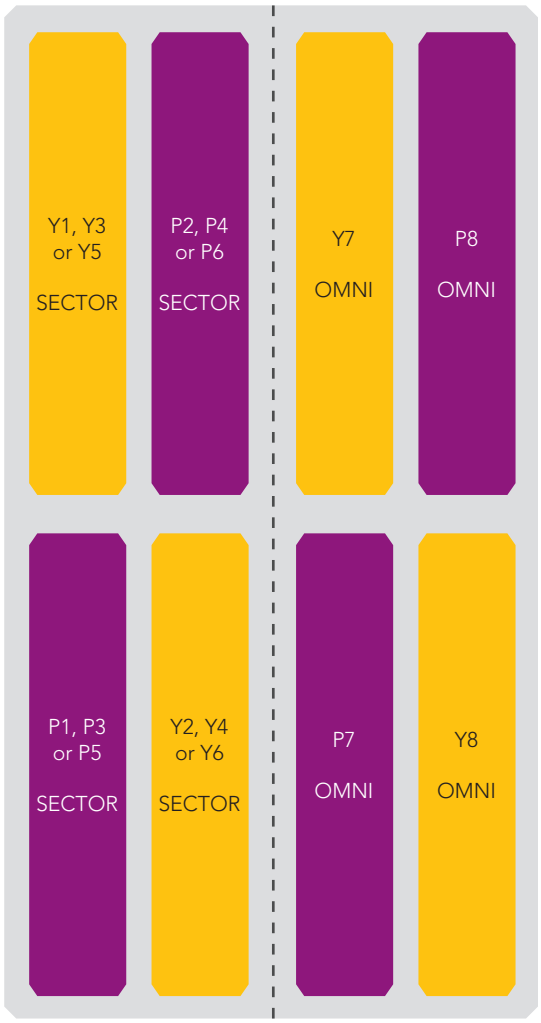


Quoted performance parameters are provided to offer typical, peak or range values only and may vary as a result of normal testing, manufacturing and operational conditions. Extreme operational conditions and/or stress on structural supports is beyond our control. Such conditions may result in damage to this product. Improvements to products may be made without notice.

4U4VTSP1X06Fxys5

ARRAY LAYOUT Topology

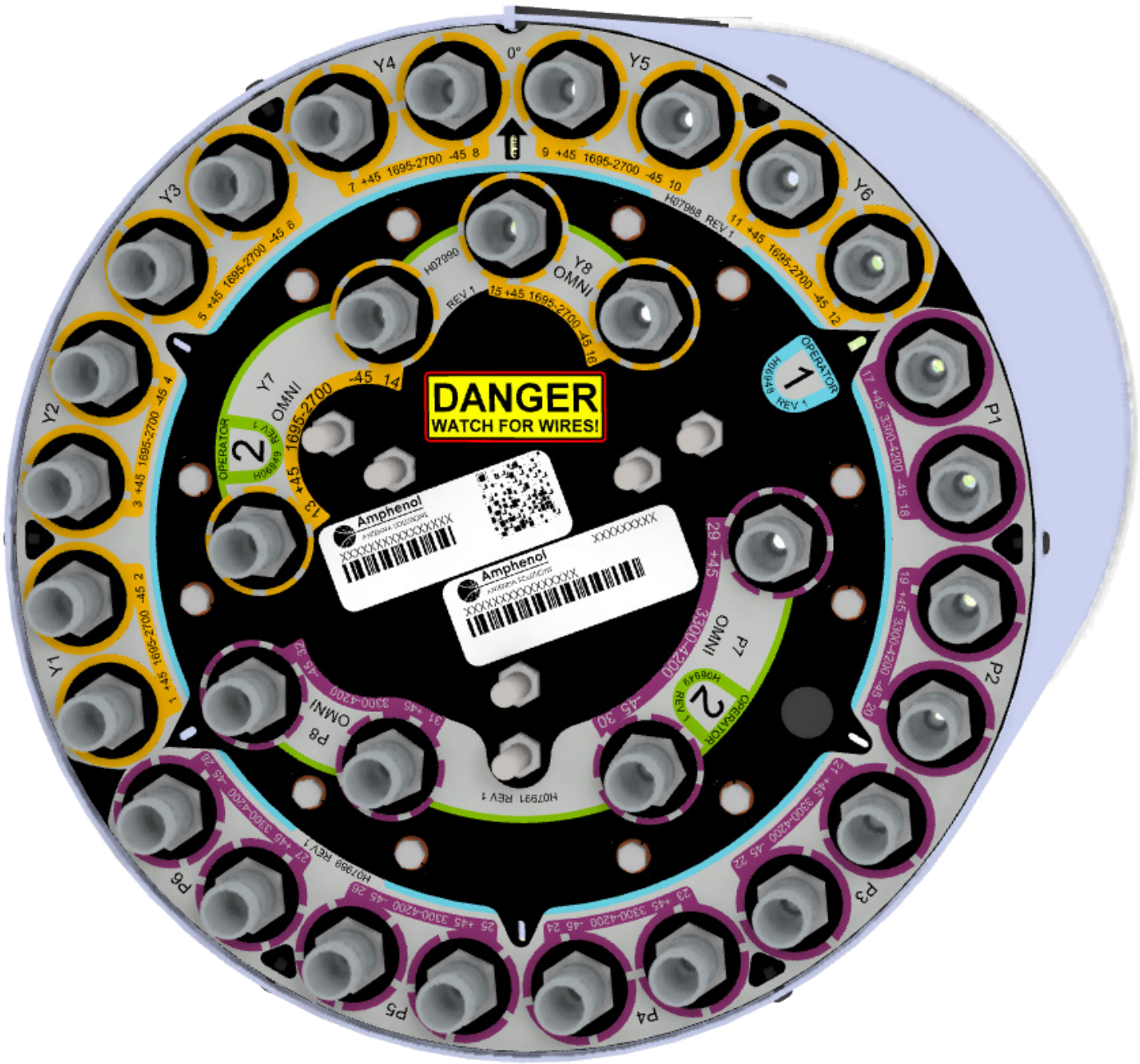
FREQUENCY	ARRAY	CONNECTOR	CONNECTOR TYPE
1695-2700 MHz	Y1	1-2	(2x) 4.3-10 Female
1695-2700 MHz	Y2	3-4	(2x) 4.3-10 Female
1695-2700 MHz	Y3	5-6	(2x) 4.3-10 Female
1695-2700 MHz	Y4	7-8	(2x) 4.3-10 Female
1695-2700 MHz	Y5	9-10	(2x) 4.3-10 Female
1695-2700 MHz	Y6	11-12	(2x) 4.3-10 Female
1695-2700 MHz	Y7	13-14	(2x) 4.3-10 Female
1695-2700 MHz	Y8	15-16	(2x) 4.3-10 Female
3300-4200 MHz	P1	17-18	(2x) 4.3-10 Female
3300-4200 MHz	P2	19-20	(2x) 4.3-10 Female
3300-4200 MHz	P3	21-22	(2x) 4.3-10 Female
3300-4200 MHz	P4	23-24	(2x) 4.3-10 Female
3300-4200 MHz	P5	25-26	(2x) 4.3-10 Female
3300-4200 MHz	P6	27-28	(2x) 4.3-10 Female
3300-4200 MHz	P7	29-30	(2x) 4.3-10 Female
3300-4200 MHz	P8	31-32	(2x) 4.3-10 Female



The illustration is not shown to scale.

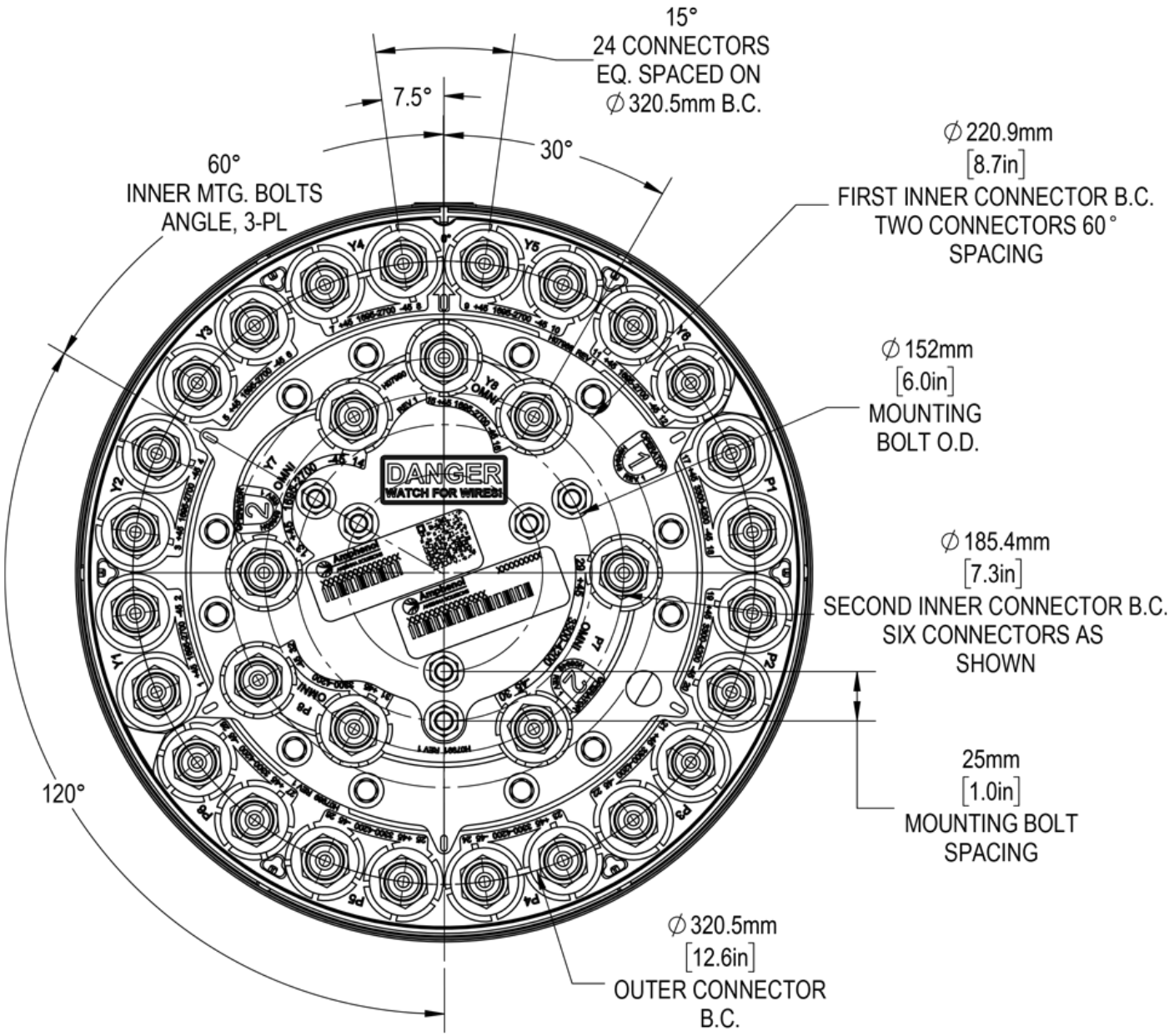
4U4VTSP1X06Fxys5

BOTTOM VIEW - LABELING



4U4VTSP1X06Fxys5

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.

Quoted performance parameters are provided to offer typical, peak or range values only and may vary as a result of normal testing, manufacturing and operational conditions. Extreme operational conditions and/or stress on structural supports is beyond our control. Such conditions may result in damage to this product. Improvements to products may be made without notice.

4U4VTSP1X06Fxys5

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.

4U4VTSP1X06Fxys5

HOW TO READ THE MODEL NUMBER

Each letter and number has meaning.

NUMBER OF BANDS and OPERATING FREQUENCY		PATTERN TYPE	AZIMUTH BMWDTH	POLARIZA-TION	LENGTH	TILT TYPE	TILT OPTIONS	CONNECTOR TYPE	VARIATION	RADOME COLOR OPTIONS
4U	4V	T	SP1	X	06	F	xy	s	5	BK BR
(8x) 1695-2700	(8x) 3300-4200	Tri-Sector	Sector & Omni Combination	XPOL	0.6 meters	Fixed Tilt	These letters are placeholders for fixed tilt options. Refer to Electrical Specifi-cations for avail-able tilt options.	4.3-10 Connector	5th generation small cell antenna 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		MODEL NUMBER
	1695-2700 MHz	3300-4200 MHz	
Grey Pantone 420 C	0°	0°	4U4VTSP1X06F00s5
	0°	2°	4U4VTSP1X06F02s5
	0°	4°	4U4VTSP1X06F04s5
	0°	6°	4U4VTSP1X06F06s5
	2°	0°	4U4VTSP1X06F20s5
	2°	2°	4U4VTSP1X06F22s5
	2°	4°	4U4VTSP1X06F24s5
	2°	6°	4U4VTSP1X06F26s5
	4°	0°	4U4VTSP1X06F40s5
	4°	2°	4U4VTSP1X06F42s5
	4°	4°	4U4VTSP1X06F44s5
	4°	6°	4U4VTSP1X06F46s5
	6°	0°	4U4VTSP1X06F60s5
	6°	2°	4U4VTSP1X06F62s5
	6°	4°	4U4VTSP1X06F64s5
	6°	6°	4U4VTSP1X06F66s5
	Y1-Y6 = 6°; Y7-Y8 = 2°	0°	4U4VTSP1X06FA0s5
	Y1-Y6 = 6°; Y7-Y8 = 2°	2°	4U4VTSP1X06FA2s5
	Y1-Y6 = 6°; Y7-Y8 = 2°	4°	4U4VTSP1X06FA4s5
	Y1-Y6 = 6°; Y7-Y8 = 2°	6°	4U4VTSP1X06FA6s5
	Y1-Y6 = 4°; Y7-Y8 = 2°	0°	4U4VTSP1X06FB0s5
	Y1-Y6 = 4°; Y7-Y8 = 2°	2°	4U4VTSP1X06FB2s5
	Y1-Y6 = 4°; Y7-Y8 = 2°	4°	4U4VTSP1X06FB4s5
	Y1-Y6 = 4°; Y7-Y8 = 2°	6°	4U4VTSP1X06FB6s5
	Y1-Y6 = 6°; Y7-Y8 = 4°	0°	4U4VTSP1X06FC00s5
	Y1-Y6 = 6°; Y7-Y8 = 4°	2°	4U4VTSP1X06FC20s5
	Y1-Y6 = 6°; Y7-Y8 = 4°	4°	4U4VTSP1X06FC40s5
	Y1-Y6 = 6°; Y7-Y8 = 4°	6°	4U4VTSP1X06FC60s5

4U4VTSP1X06Fxys5

ORDERING OPTIONS Select from the following ordering options

SELECT RADOME COLOR	SELECT DEGREE OF ELECTRICAL DOWNTILT FOR EACH BAND		MODEL NUMBER
	1695-2700 MHz	3300-4200 MHz	
Brown Pantone 476 C	0°	0°	4U4VTSP1X06F00s5BR
	0°	2°	4U4VTSP1X06F02s5BR
	0°	4°	4U4VTSP1X06F04s5BR
	0°	6°	4U4VTSP1X06F06s5BR
	2°	0°	4U4VTSP1X06F20s5BR
	2°	2°	4U4VTSP1X06F22s5BR
	2°	4°	4U4VTSP1X06F24s5BR
	2°	6°	4U4VTSP1X06F26s5BR
	4°	0°	4U4VTSP1X06F40s5BR
	4°	2°	4U4VTSP1X06F42s5BR
	4°	4°	4U4VTSP1X06F44s5BR
	4°	6°	4U4VTSP1X06F46s5BR
	6°	0°	4U4VTSP1X06F60s5BR
	6°	2°	4U4VTSP1X06F62s5BR
	6°	4°	4U4VTSP1X06F64s5BR
	6°	6°	4U4VTSP1X06F66s5BR
	Y1-Y6 = 6°; Y7-Y8 = 2°	0°	4U4VTSP1X06FA0s5BR
	Y1-Y6 = 6°; Y7-Y8 = 2°	2°	4U4VTSP1X06FA2s5BR
	Y1-Y6 = 6°; Y7-Y8 = 2°	4°	4U4VTSP1X06FA4s5BR
	Y1-Y6 = 6°; Y7-Y8 = 2°	6°	4U4VTSP1X06FA6s5BR
	Y1-Y6 = 4°; Y7-Y8 = 2°	0°	4U4VTSP1X06FB0s5BR
	Y1-Y6 = 4°; Y7-Y8 = 2°	2°	4U4VTSP1X06FB2s5BR
	Y1-Y6 = 4°; Y7-Y8 = 2°	4°	4U4VTSP1X06FB4s5BR
	Y1-Y6 = 4°; Y7-Y8 = 2°	6°	4U4VTSP1X06FB6s5BR
	Y1-Y6 = 6°; Y7-Y8 = 4°	0°	4U4VTSP1X06FC00s5BR
	Y1-Y6 = 6°; Y7-Y8 = 4°	2°	4U4VTSP1X06FC20s5BR
	Y1-Y6 = 6°; Y7-Y8 = 4°	4°	4U4VTSP1X06FC40s5BR
	Y1-Y6 = 6°; Y7-Y8 = 4°	6°	4U4VTSP1X06FC60s5BR

4U4VTSP1X06Fxys5

ORDERING OPTIONS Select from the following ordering options

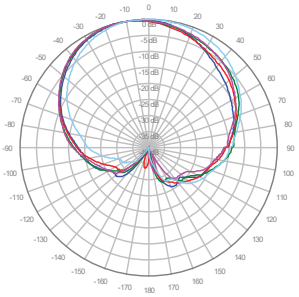
SELECT RADOME COLOR	SELECT DEGREE OF ELECTRICAL DOWNTILT FOR EACH BAND		MODEL NUMBER
	1695-2700 MHz	3300-4200 MHz	
Black RAL 9011	0°	0°	4U4VTSP1X06F00s5BK
	0°	2°	4U4VTSP1X06F02s5BK
	0°	4°	4U4VTSP1X06F04s5BK
	0°	6°	4U4VTSP1X06F06s5BK
	2°	0°	4U4VTSP1X06F20s5BK
	2°	2°	4U4VTSP1X06F22s5BK
	2°	4°	4U4VTSP1X06F24s5BK
	2°	6°	4U4VTSP1X06F26s5BK
	4°	0°	4U4VTSP1X06F40s5BK
	4°	2°	4U4VTSP1X06F42s5BK
	4°	4°	4U4VTSP1X06F44s5BK
	4°	6°	4U4VTSP1X06F46s5BK
	6°	0°	4U4VTSP1X06F60s5BK
	6°	2°	4U4VTSP1X06F62s5BK
	6°	4°	4U4VTSP1X06F64s5BK
	6°	6°	4U4VTSP1X06F66s5BK
	Y1-Y6 = 6°; Y7-Y8 = 2°	0°	4U4VTSP1X06FA0s5BK
	Y1-Y6 = 6°; Y7-Y8 = 2°	2°	4U4VTSP1X06FA2s5BK
	Y1-Y6 = 6°; Y7-Y8 = 2°	4°	4U4VTSP1X06FA4s5BK
	Y1-Y6 = 6°; Y7-Y8 = 2°	6°	4U4VTSP1X06FA6s5BK
	Y1-Y6 = 4°; Y7-Y8 = 2°	0°	4U4VTSP1X06FB0s5BK
	Y1-Y6 = 4°; Y7-Y8 = 2°	2°	4U4VTSP1X06FB2s5BK
	Y1-Y6 = 4°; Y7-Y8 = 2°	4°	4U4VTSP1X06FB4s5BK
	Y1-Y6 = 4°; Y7-Y8 = 2°	6°	4U4VTSP1X06FB6s5BK
	Y1-Y6 = 6°; Y7-Y8 = 4°	0°	4U4VTSP1X06FC00s5BK
	Y1-Y6 = 6°; Y7-Y8 = 4°	2°	4U4VTSP1X06FC20s5BK
	Y1-Y6 = 6°; Y7-Y8 = 4°	4°	4U4VTSP1X06FC40s5BK
	Y1-Y6 = 6°; Y7-Y8 = 4°	6°	4U4VTSP1X06FC60s5BK

4U4VTSP1X06Fxys5

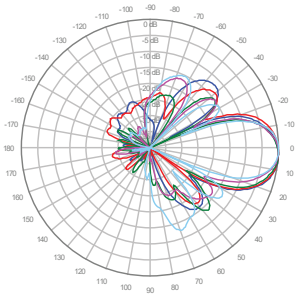
1800 MHz
1900 MHz
2100 MHz
2300 MHz
2600 MHz

Y1, 2° TILT

+45°

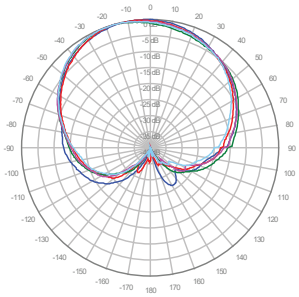


Azimuth

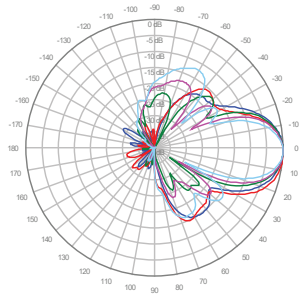


Elevation

-45°



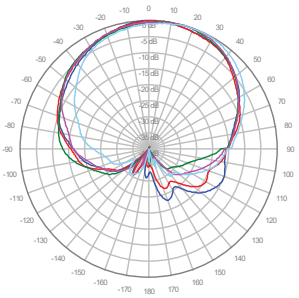
Azimuth



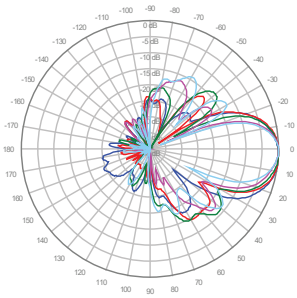
Elevation

Y2, 2° TILT

+45°

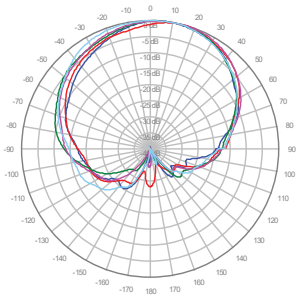


Azimuth

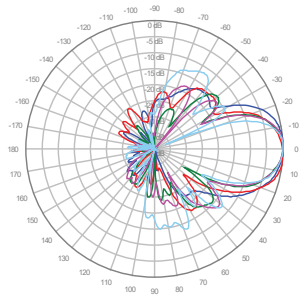


Elevation

-45°



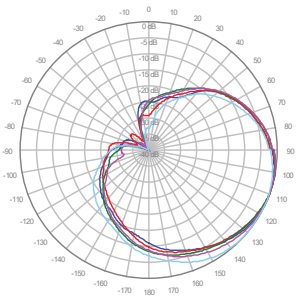
Azimuth



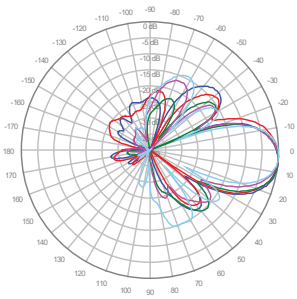
Elevation

Y3, 2° TILT

+45°

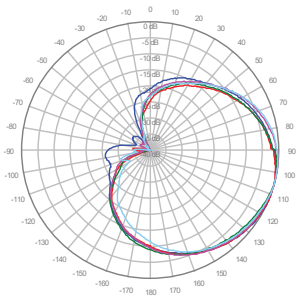


Azimuth

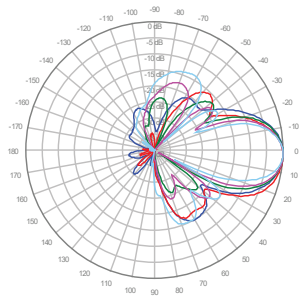


Elevation

-45°



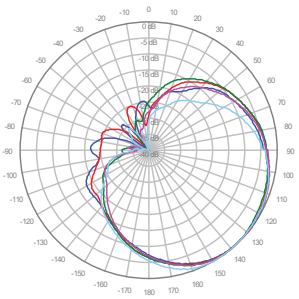
Azimuth



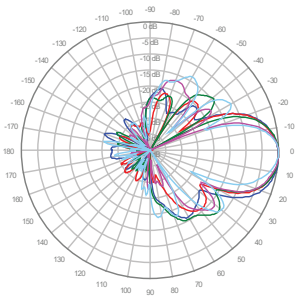
Elevation

Y4, 2° TILT

+45°

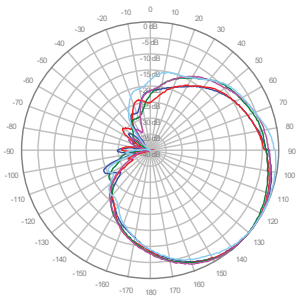


Azimuth

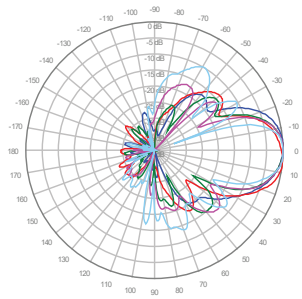


Elevation

-45°



Azimuth



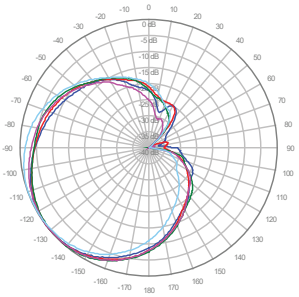
Elevation

4U4VTSP1X06Fxys5

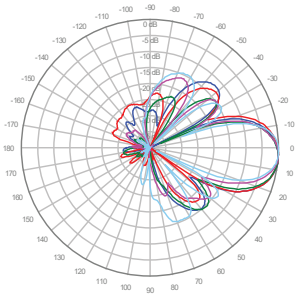
1800 MHz
1900 MHz
2100 MHz
2300 MHz
2600 MHz

Y5, 2° TILT

+45°

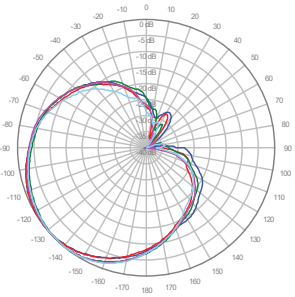


Azimuth

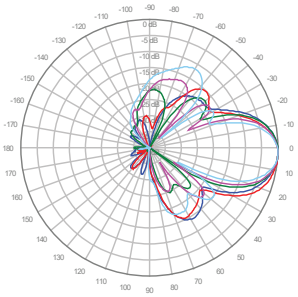


Elevation

-45°



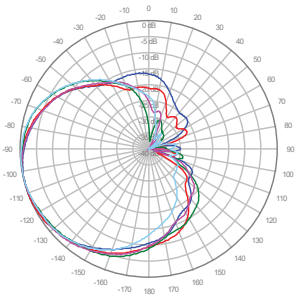
Azimuth



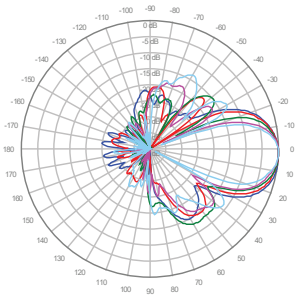
Elevation

Y6, 2° TILT

+45°

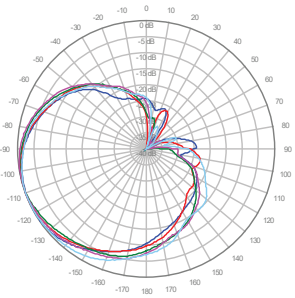


Azimuth

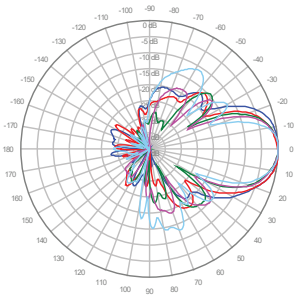


Elevation

-45°



Azimuth



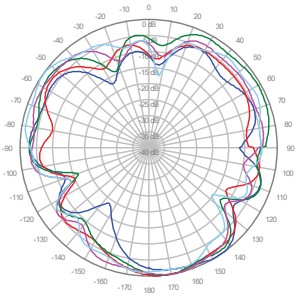
Elevation

4U4VTSP1X06Fxys5

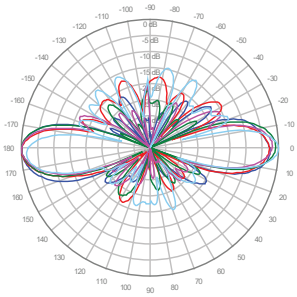
1800 MHz
1900 MHz
2100 MHz
2300 MHz
2600 MHz

Y7, 2° TILT

+45°

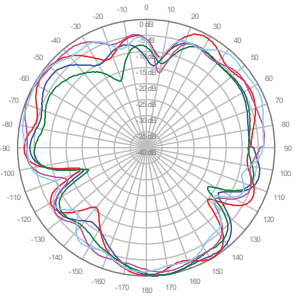


Azimuth

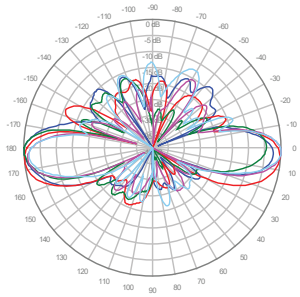


Elevation

-45°



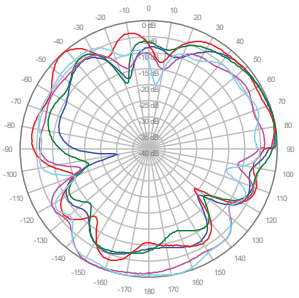
Azimuth



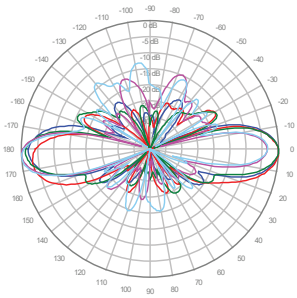
Elevation

Y8, 2° TILT

+45°

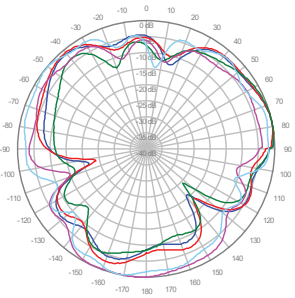


Azimuth

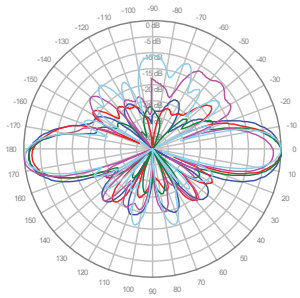


Elevation

-45°



Azimuth



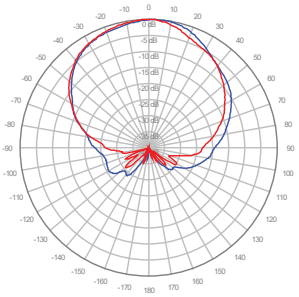
Elevation

4U4VTSP1X06Fxys5

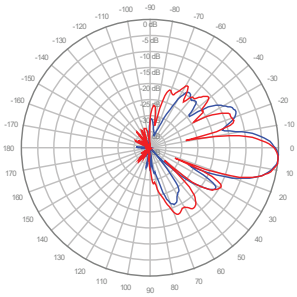
3600 MHz
4000 MHz

P1, 2° TILT

+45°

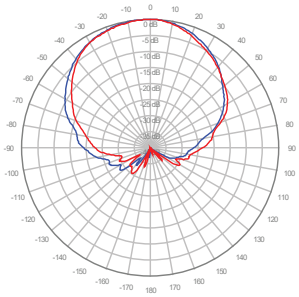


Azimuth

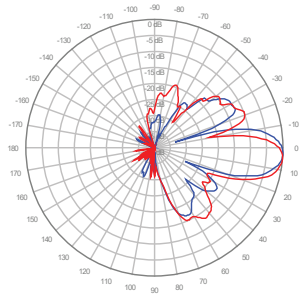


Elevation

-45°



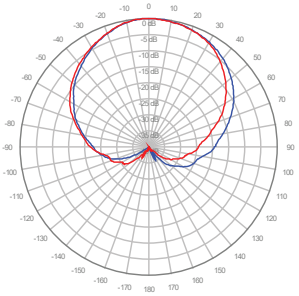
Azimuth



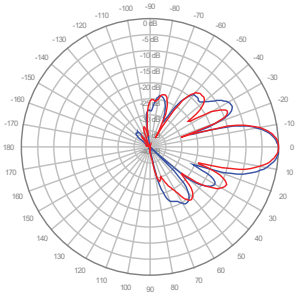
Elevation

P2, 2° TILT

+45°

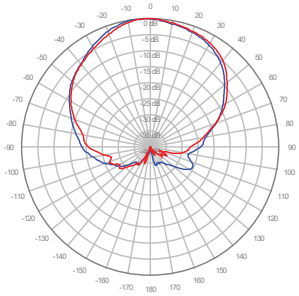


Azimuth

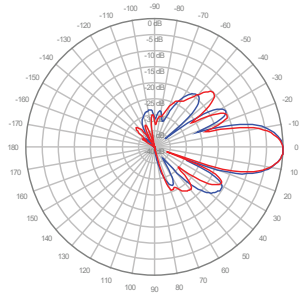


Elevation

-45°



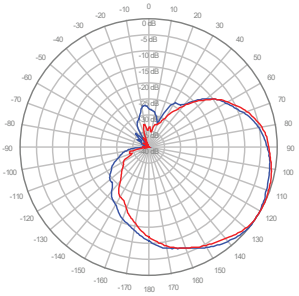
Azimuth



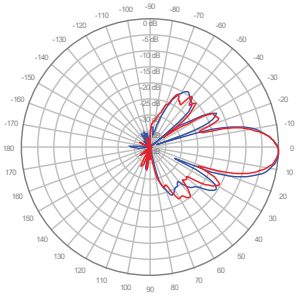
Elevation

P3, 2° TILT

+45°

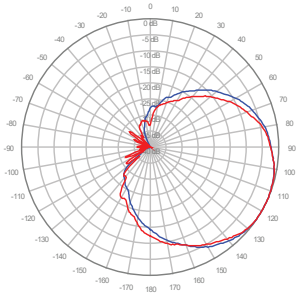


Azimuth

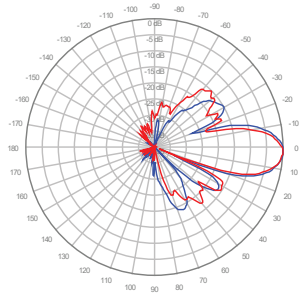


Elevation

-45°



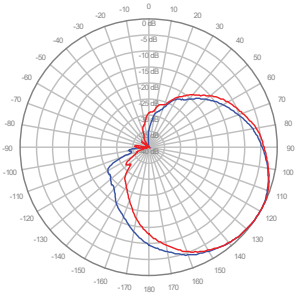
Azimuth



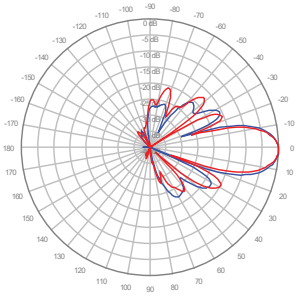
Elevation

P4, 2° TILT

+45°

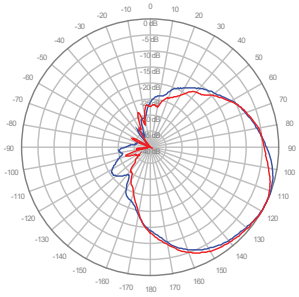


Azimuth

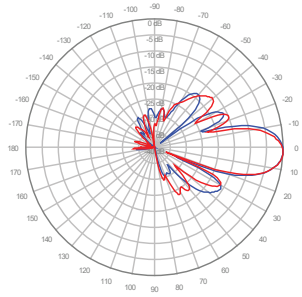


Elevation

-45°



Azimuth



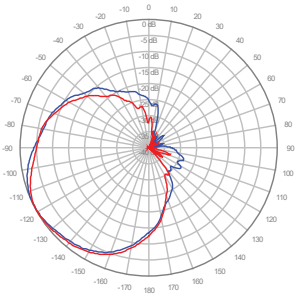
Elevation

4U4VTSP1X06Fxys5

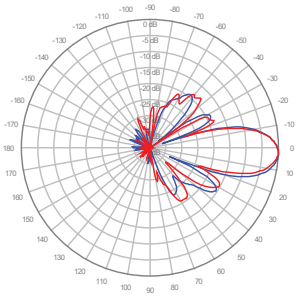
3600 MHz
4000 MHz

Y5, 2° TILT

+45°

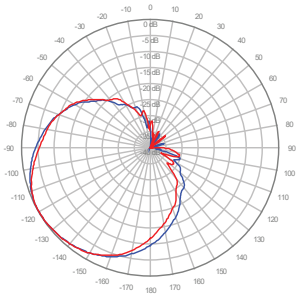


Azimuth

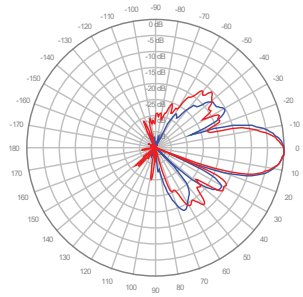


Elevation

-45°



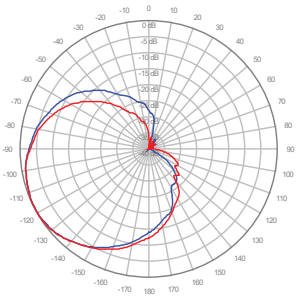
Azimuth



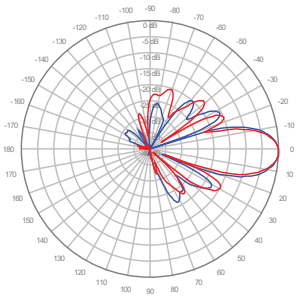
Elevation

Y6, 2° TILT

+45°

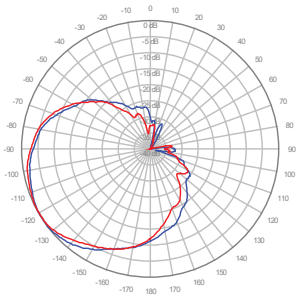


Azimuth

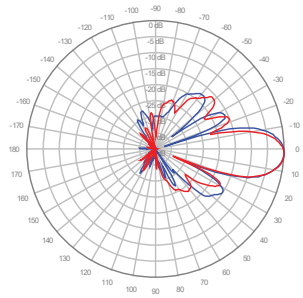


Elevation

-45°



Azimuth



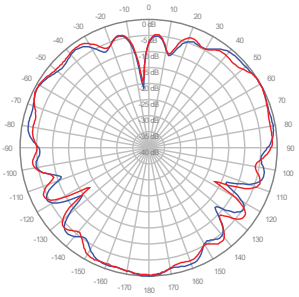
Elevation

4U4VTSP1X06Fxys5

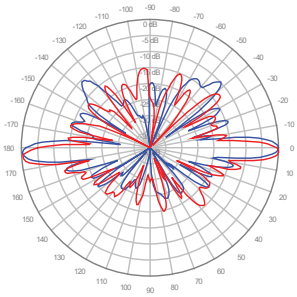
3600 MHz
4000 MHz

Y7, 2° TILT

+45°

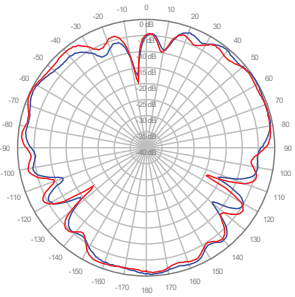


Azimuth

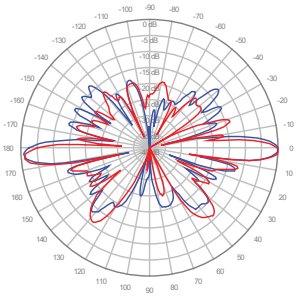


Elevation

-45°



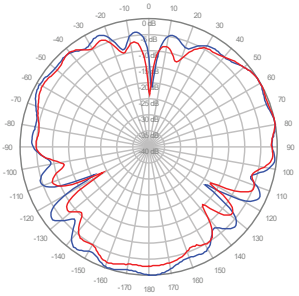
Azimuth



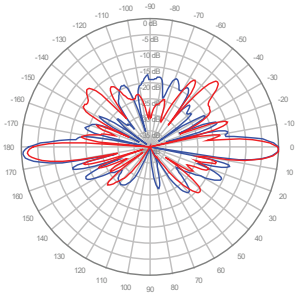
Elevation

Y8, 2° TILT

+45°

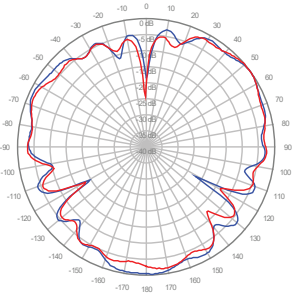


Azimuth

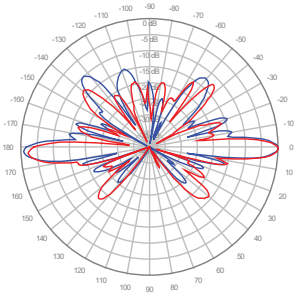


Elevation

-45°



Azimuth



Elevation