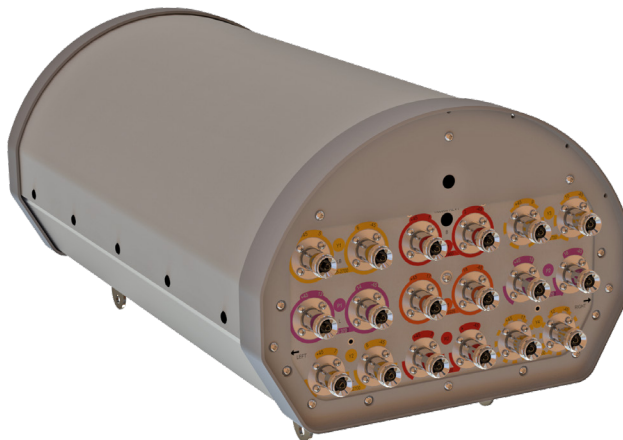


## 2C4U3MX065X06Fwxys0

### Features

- Fixed tilt panel antenna with 18 connectors
- Ultra-wide band performance
- Ideal solution for Small Cell applications
- This antenna meets the requirements of the U-NII



| Frequency Range (MHz)                              | (2x) 696-960                           | (4x) 1695-2700         | (2x) 3550-3700 | (1x) 5150-5925 |
|--|--|------------------------|----------------|----------------|
| Array  | ■ R1, ■ R2                             | ■ Y1, ■ Y2, ■ Y3, ■ Y4 | ■ P1, ■ P2     | ■ O1           |
| Connector  | 4 PORTS                                | 8 PORTS                | 4 PORTS        | 2 PORTS        |
| Polarization                                       | XPOL                                   | XPOL                   | XPOL           | XPOL           |
| Azimuth Beamwidth (avg)                            | 65°                                    | 65°                    | 65°            | 65°            |
| Electrical Downtilt                                | 0°                                     | 2°, 4°, 6°             | 0°             | 0°             |
| Maximum Continuous Power Per Port @ 50° C (122° F) | 500 WATTS                              | 300 WATTS              | 100 WATTS      | 50 WATTS       |
| Maximum Total Continuous Power at 50° C (122° F)   | 4900 WATTS                             |                        |                |                |
| Total Connector Count                              | 18 PORTS                               |                        |                |                |
| Connector Type                                     | 4.3-10 FEMALE                          |                        |                |                |
| Dimensions   | 633 x 343 x 246 mm (24.9 x 13.5 x 9.7) |                        |                |                |
| Radome Color Options                               | GREY                                   |                        |                |                |

### ELECTRICAL SPECIFICATIONS

■ R1 ■ R2

|   |           |         |                                      |               |
|---|-----------|---------|--------------------------------------|---------------|
| Frequency Range                                       |           | MHz     | (2x) 696-960                         |               |
| Frequency Sub-Range                                   |           | MHz     | 696-806                              | 806-960       |
| Polarization  |           | ---     | (2x) ±45°                            |               |
| Gain  | BASTA     | dBi     | 7.5 ± 0.7                            | 7.4 ± 1.1     |
|   | MAX       | dBi     | 8.2                                  | 8.5           |
| Azimuth Beamwidth (3 dB)                              |           | degrees | 85.4° ± 6.5°                         | 79.8° ± 16.9° |
| Elevation Beamwidth (3 dB)                            |           | degrees | 75.8° ± 18.2°                        | 73.6° ± 20.2° |
| Electrical Downtilt                                   |           | degrees | (w) 0°                               |               |
| Impedance   |           | Ohms    | 50                                   |               |
| 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 same band; > 30 different bands |               |

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## 2C4U3MX065X06Fwxys0

### ELECTRICAL SPECIFICATIONS

■ Y1 ■ Y2 ■ Y3 ■ Y4

|  |           |         |                                      |              |               |               |
|--|-----------|---------|--------------------------------------|--------------|---------------|---------------|
| Frequency Range  |           | MHz     | (4x) 1695-2700                       |              |               |               |
| Frequency Sub-Range                                      |           | MHz     | 1695-1880                            | 1850-1990    | 1920-2200     | 2300-2700     |
| Polarization   |           | ---     | (4x) ±45°                            |              |               |               |
| Gain   | BASTA     | dBi     | 11.2 ± 0.6                           | 11.2 ± 0.7   | 11.2 ± 0.9    | 11.6 ± 1.0    |
|  | MAX       | dBi     | 11.8                                 | 11.9         | 12.1          | 12.6          |
| Azimuth Beamwidth (3 dB)                                 |           | degrees | 68.7° ± 10.2°                        | 73.5° ± 7.7° | 71.4° ± 10.9° | 59.9° ± 14.0° |
| Elevation Beamwidth (3 dB)                               |           | degrees | 35.9° ± 4.0°                         | 32.6° ± 3.7° | 30.6° ± 3.9°  | 25.9° ± 3.6°  |
| Electrical Downtilt                                      |           | degrees | (x) 2°, 4°, 6°                       |              |               |               |
| Impedance  |           | Ohms    | 50                                   |              |               |               |
| VSWR   |           | ---     | ≤ 1.5:1                              |              |               |               |
| Passive Intermodulation<br>3rd Order for 2x20 W Carriers |           | dBc     | < -153                               |              |               |               |
| Upper Sidelobe Suppression                               |           | dB      | N/A                                  |              |               |               |
| Isolation  | Intraband | dB      | > 25                                 |              |               |               |
|  | Interband | dB      | > 28 same band; > 30 different bands |              |               |               |

### ELECTRICAL SPECIFICATIONS

■ P1 ■ P2

|  |           |         |                                      |  |
|--|-----------|---------|--------------------------------------|--|
| Frequency Range  |           | MHz     | (2x) 3550-3700                       |  |
| Polarization   |           | ---     | (2x) ±45°                            |  |
| Gain   | BASTA     | dBi     | 8.1 ± 0.7                            |  |
|  | MAX       | dBi     | 8.8                                  |  |
| Azimuth Beamwidth (3 dB)                                 |           | degrees | 70.4°±8.2°                           |  |
| Elevation Beamwidth (3 dB)                               |           | degrees | 42.8°±3.9°                           |  |
| Electrical Downtilt                                      |           | degrees | (y) 0°                               |  |
| Impedance  |           | Ohms    | 50                                   |  |
| VSWR   |           | ---     | ≤ 1.5:1                              |  |
| Passive Intermodulation<br>3rd Order for 2x20 W Carriers |           | dBc     | N/A                                  |  |
| Upper Sidelobe Suppression                               |           | dB      | N/A                                  |  |
| Isolation  | Intraband | dB      | > 25                                 |  |
|  | Interband | dB      | > 28 same band; > 30 different bands |  |

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## 2C4U3MX065X06Fwxys0

### ELECTRICAL SPECIFICATIONS

■ O1

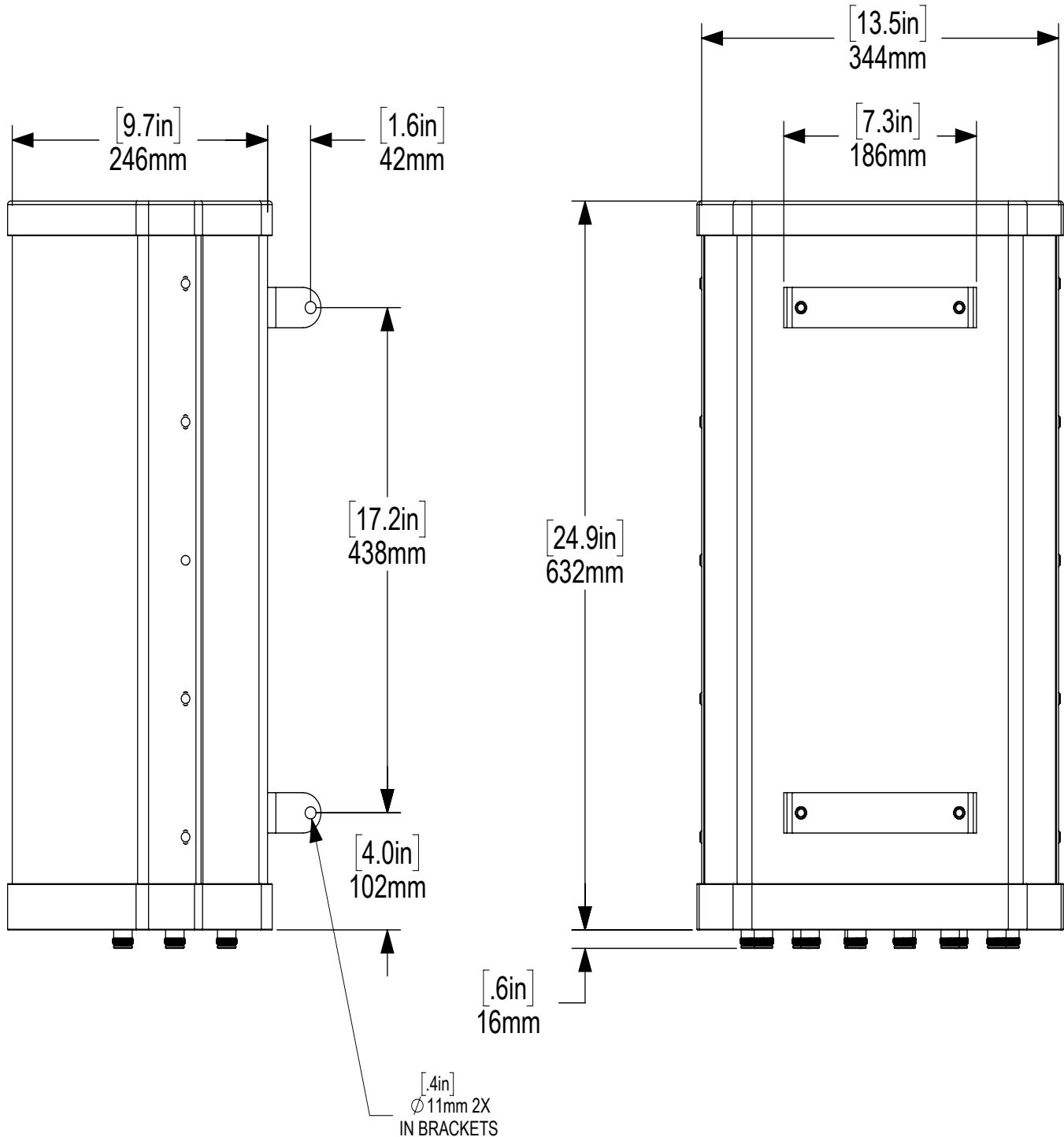
|  |           |              |                                      |
|--|-----------|--------------|--------------------------------------|
| Frequency Range  |           | MHz          | (1x) 5150-5925                       |
| Polarization   |           | ---          | ±45°                                 |
| Gain   | BASTA     | dBi          | 5.6 ± 0.6                            |
|  | MAX       | dBi          | 6.2                                  |
| Azimuth Beamwidth (3 dB)                                 |           | degrees      | 71.9° ± 9.9°                         |
| Elevation Beamwidth (3 dB)                               |           | degrees      | 21.6° ± 1.5°                         |
| Electrical Downtilt                                      |           | degrees      | (y) 0°                               |
| Impedance  |           | Ohms         | 50                                   |
| VSWR   |           | ---          | ≤ 1.5:1                              |
| Passive Intermodulation<br>3rd Order for 2x20 W Carriers |           | dBm<br>(dBc) | N/A                                  |
| Upper Sidelobe Suppression                               |           | dB           | U-NII Compliant                      |
| Isolation  | Intraband | dB           | > 25                                 |
|  | Interband | dB           | > 28 same band; > 30 different bands |

### MECHANICAL SPECIFICATIONS

|                                       |             |                                   |                              |
|---------------------------------------|-------------|-----------------------------------|------------------------------|
| Antenna                               | Length      | mm (in)                           | 633 (24.9)                   |
|                                       | Width       | mm (in)                           | 343 (13.5)                   |
|                                       | Depth       | mm (in)                           | 246 (9.7)                    |
| Net Weight - Antenna Only             |             | kg (lbs)                          | 7.3 (16)                     |
| Windload                              | Calculation | km/h (mph)                        | 160 (100)                    |
|                                       | Frontal     | N (lbf)                           | 262 (59)                     |
|                                       | Side        | N (lbf)                           | 107 (24)                     |
| Survival Wind Speed                   |             | km/h (mph)                        | 241 (150)                    |
| Wind Area                             |             | m <sup>2</sup> (ft <sup>2</sup> ) | 0.21 (2.3)                   |
| Connector                             | Type        | ---                               | 4.3-10 Female                |
|                                       | Quantity    | ---                               | 18                           |
|                                       | Position    | ---                               | Bottom                       |
| Radome Color                          |             | ---                               | Grey                         |
| Operating Temperature                 |             | degrees                           | -40 to +60 C (-40 to +140 F) |
| Lightning Protection (Grounding Type) |             | ---                               | Direct Ground                |

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2C4U3MX065X06Fwxys0



**SIDE VIEW**

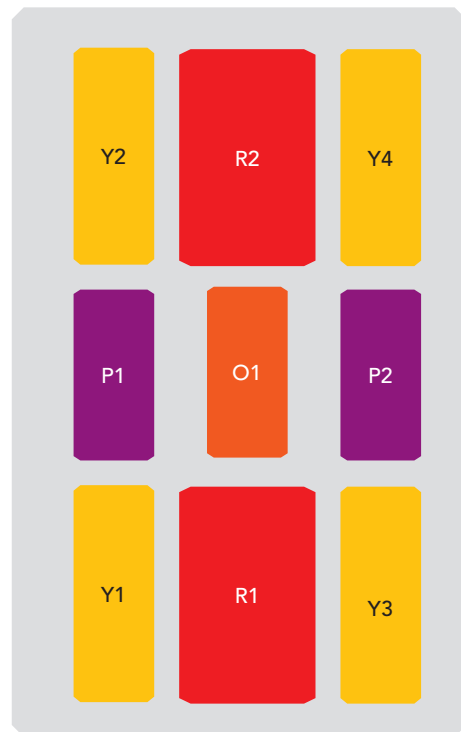
**BOTTOM VIEW**

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## 2C4U3MX065X06Fwxys0

### ARRAY LAYOUT Topology

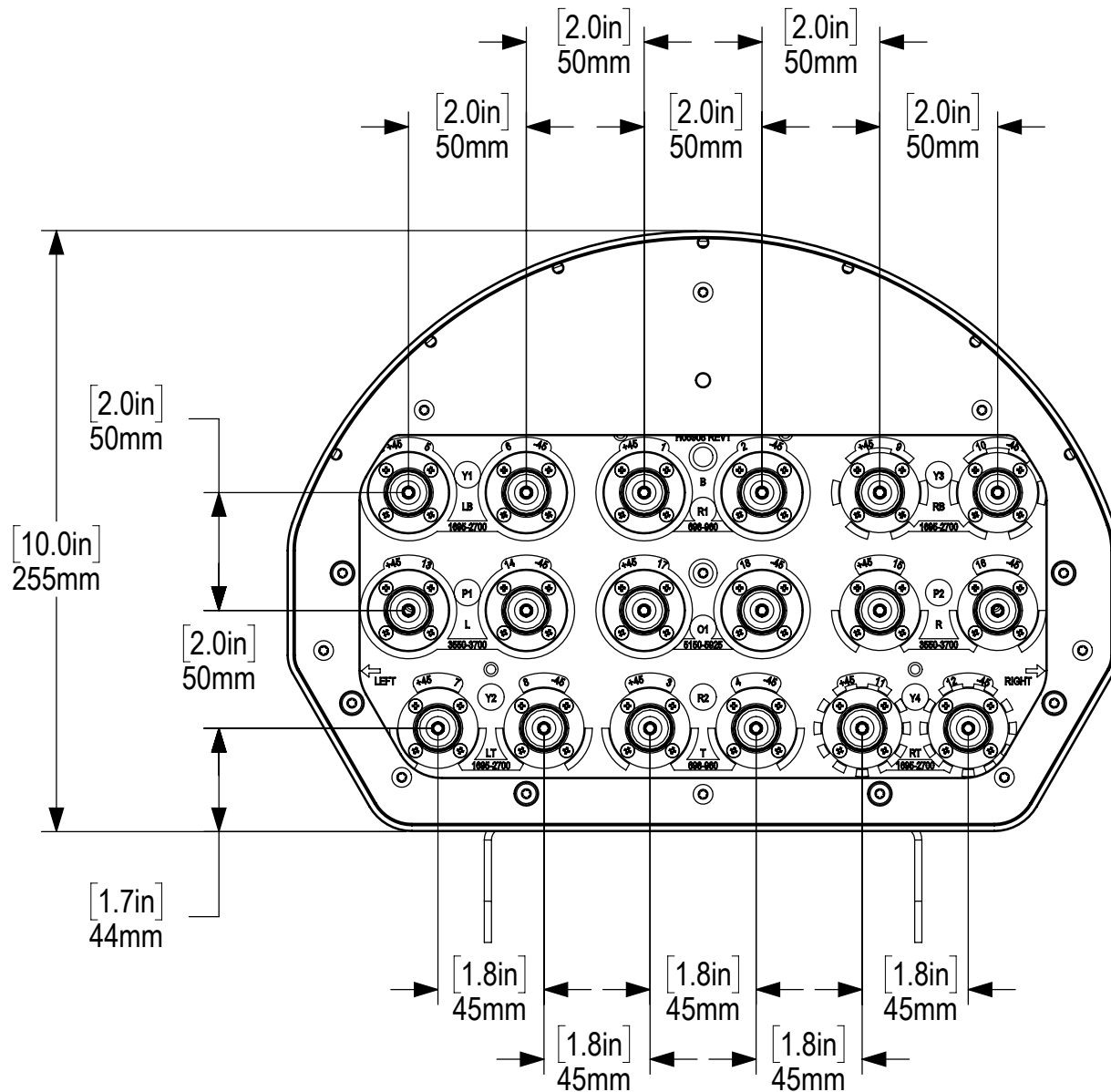
| FREQUENCY | ARRAY                                    | CONNECTOR | CONNECTOR TYPE     |
|-----------|--|-----------|--------------------|
| 696-960   | <span style="color: red;">■</span> R1    | 1-2       | (2x) 4.3-10 Female |
| 696-960   | <span style="color: red;">■</span> R2    | 3-4       | (2x) 4.3-10 Female |
| 1695-2700 | <span style="color: yellow;">■</span> Y1 | 5-6       | (2x) 4.3-10 Female |
| 1695-2700 | <span style="color: yellow;">■</span> Y2 | 7-8       | (2x) 4.3-10 Female |
| 1695-2700 | <span style="color: yellow;">■</span> Y3 | 9-10      | (2x) 4.3-10 Female |
| 1695-2700 | <span style="color: yellow;">■</span> Y4 | 11-12     | (2x) 4.3-10 Female |
| 3550-3700 | <span style="color: purple;">■</span> P1 | 13-14     | (2x) 4.3-10 Female |
| 3550-3700 | <span style="color: purple;">■</span> P2 | 15-16     | (2x) 4.3-10 Female |
| 5150-5925 | <span style="color: orange;">■</span> O1 | 17-18     | (2x) 4.3-10 Female |



The illustration is not shown to scale.

## 2C4U3MX065X06Fwxyso

### 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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## 2C4U3MX065X06Fwxys0

### MOUNTING KITS Select from the following mounting options when ordering.

| MODEL NUMBER | DESCRIPTION  | FITS PIPE DIAMETER     | WEIGHT          |
|--------------|--|------------------------|-----------------|
| MKS09P01     | 2-POINT MOUNTING BRACKET KIT                           | 50-115 mm (2.0-4.5 in) | 2.9 kg (6 lbs)  |
| MKS09T01     | 2-POINT, SCISSOR TILT, MOUNTING & DOWNTILT BRACKET KIT | 50-115 mm (2.0-4.5 in) | 4.5 kg (10 lbs) |



The antennas shown in the mounting kit illustrations above are generic representations and may not resemble the antenna described within this data sheet.

## 2C4U3MX065X06Fwxyso

### 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          | ORDERING OPTION   |
|---|-------------------|-------------------|-------------------|------------------------|-----------------|--------------|------------|------------|--|------------------|--------------------|---|
| 2C                                      | 4U                | 3M                |                   | X                      | 065             | X            | 06         | F          | wxy  | s                | 0                  | -P<br>-T  |
| (2x)<br>696-960                         | (4x)<br>1695-2700 | (2x)<br>3550-3700 | (1x)<br>5150-5925 | Standard Panel Antenna | 65°             | XPOL         | 0.6 meters | Fixed Tilt | These letters are placeholders for fixed tilt options.<br><br>Refer to Electrical Specifications for available tilt options. | 4.3-10 Connector | Original Variation | To order the antenna and mounting kit together as one line item, add a -P for the 2-POINT MOUNTING BRACKET KIT (MKS09P01) or a -T for the 2-POINT, SCISSOR TILT, MOUNTING & DOWNTILT BRACKET KIT (MKS09T01) to the end of the model number.<br><br>If -P or -T is not added, the bracket kit can be added as a separate line item, or the antenna shipped without a bracket.<br><br>Refer to the ordering options on the following page for further detail. |



## 2C4U3MX065X06Fwxys0

### ORDERING OPTIONS Select from the following ordering options

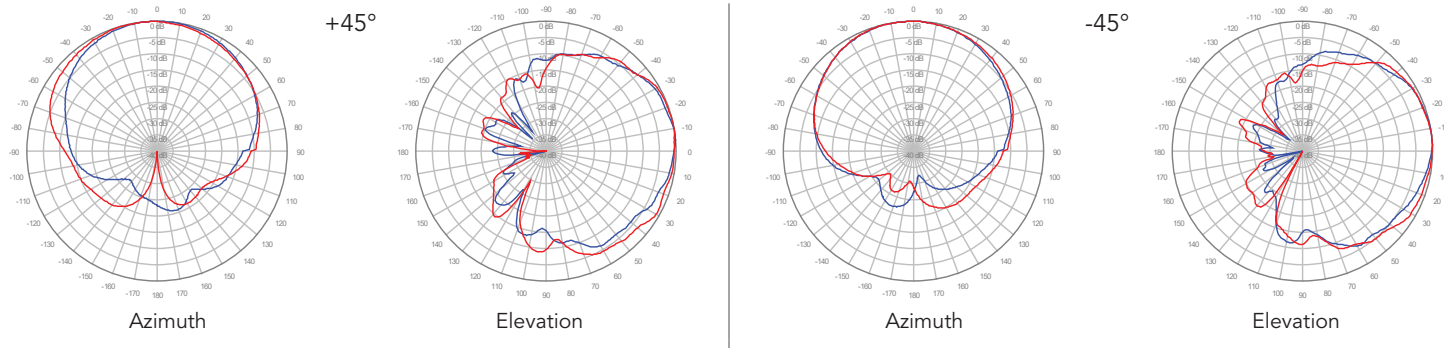
| SELECT MOUNTING KIT   | SELECT DEGREE OF ELECTRICAL DOWNTILT FOR EACH BAND |                              |               |               | ORDER MODEL NUMBER     |
|---|--|------------------------------|---------------|---------------|------------------------|
|   | 696-960 MHz  | 1695-2700 MHz                | 3550-3700 MHz | 5150-5925 MHz |                        |
| ANTENNA ONLY - NO MOUNTING KIT  | 0°   | 2°                           | 0°            | 0°            | 2C4U3MX065X06F020s0    |
|   | 0°   | 4°                           | 0°            | 0°            | 2C4U3MX065X06F040s0    |
|   | 0°   | 6°                           | 0°            | 0°            | 2C4U3MX065X06F060s0    |
|   | 0°   | Y1 & Y2 = 2°<br>Y3 & Y4 = 4° | 0°            | 0°            | 2C4U3MX065X06FAAA s0   |
|   | 0°   | Y1 & Y2 = 2°<br>Y3 & Y4 = 6° | 0°            | 0°            | 2C4U3MX065X06FBBBs0    |
|   | 0°   | Y1 & Y2 = 4°<br>Y3 & Y4 = 6° | 0°            | 0°            | 2C4U3MX065X06FCCCs0    |
| ANTENNA WITH <b>MKS09P01</b> MOUNTING KIT<br><br>2-Point Mounting Bracket Kit                           | 0°   | 2°                           | 0°            | 0°            | 2C4U3MX065X06F020s0-P  |
|   | 0°   | 4°                           | 0°            | 0°            | 2C4U3MX065X06F040s0-P  |
|   | 0°   | 6°                           | 0°            | 0°            | 2C4U3MX065X06F060s0-P  |
|   | 0°   | Y1 & Y2 = 2°<br>Y3 & Y4 = 4° | 0°            | 0°            | 2C4U3MX065X06FAAA s0-P |
|   | 0°   | Y1 & Y2 = 2°<br>Y3 & Y4 = 6° | 0°            | 0°            | 2C4U3MX065X06FBBBs0-P  |
|   | 0°   | Y1 & Y2 = 4°<br>Y3 & Y4 = 6° | 0°            | 0°            | 2C4U3MX065X06FCCCs0-P  |
| ANTENNA WITH <b>MKS09T01</b> MOUNTING KIT<br><br>2-Point, Scissor Tilt, Mounting & Downtilt Bracket Kit | 0°   | 2°                           | 0°            | 0°            | 2C4U3MX065X06F020s0-T  |
|   | 0°   | 4°                           | 0°            | 0°            | 2C4U3MX065X06F040s0-T  |
|   | 0°   | 6°                           | 0°            | 0°            | 2C4U3MX065X06F060s0-T  |
|   | 0°   | Y1 & Y2 = 2°<br>Y3 & Y4 = 4° | 0°            | 0°            | 2C4U3MX065X06FAAA s0-T |
|   | 0°   | Y1 & Y2 = 2°<br>Y3 & Y4 = 6° | 0°            | 0°            | 2C4U3MX065X06FBBBs0-T  |
|   | 0°   | Y1 & Y2 = 4°<br>Y3 & Y4 = 6° | 0°            | 0°            | 2C4U3MX065X06FCCCs0-T  |

2C4U3MX065X06Fwxys0

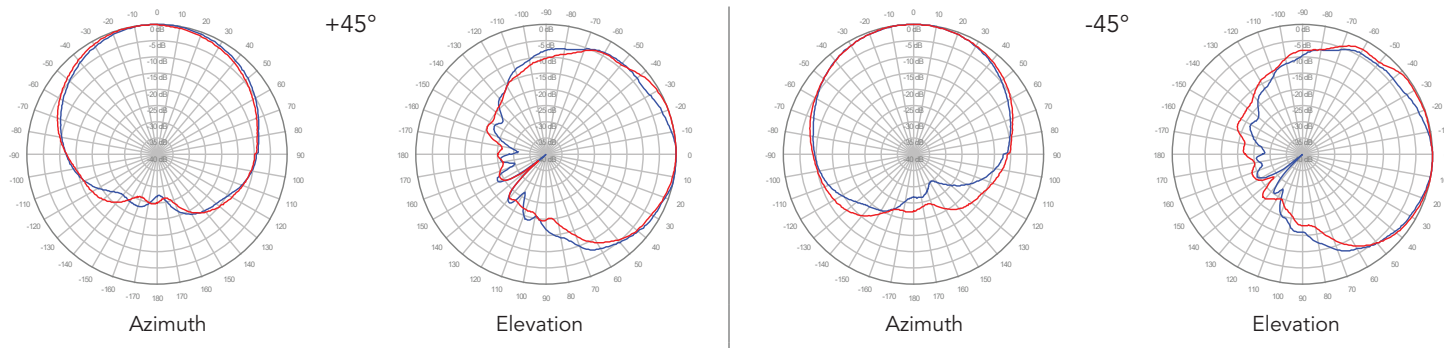
750 MHz ———

850 MHz ———

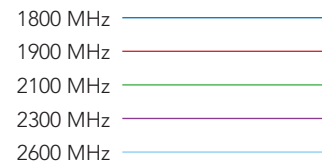
■ R1, 0° TILT



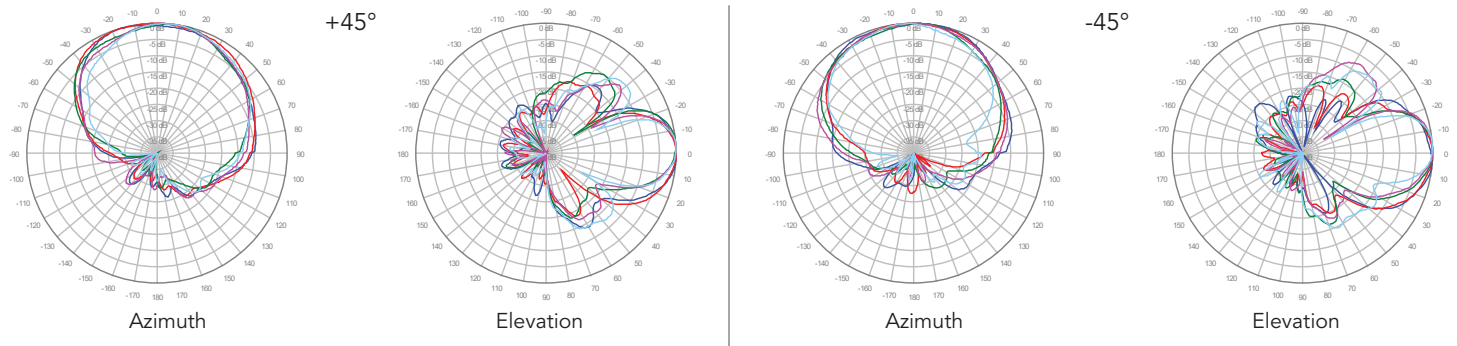
■ R2, 0° TILT



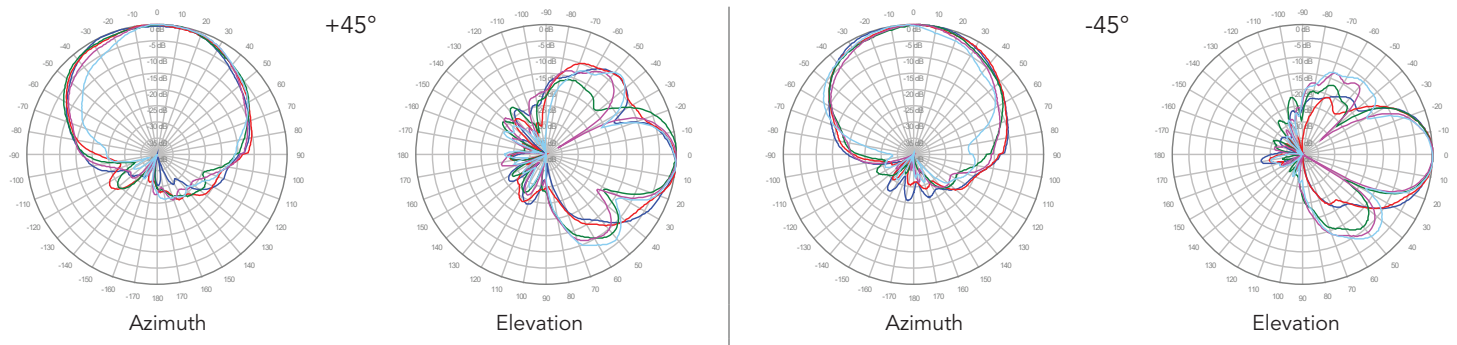
## 2C4U3MX065X06Fwxs0



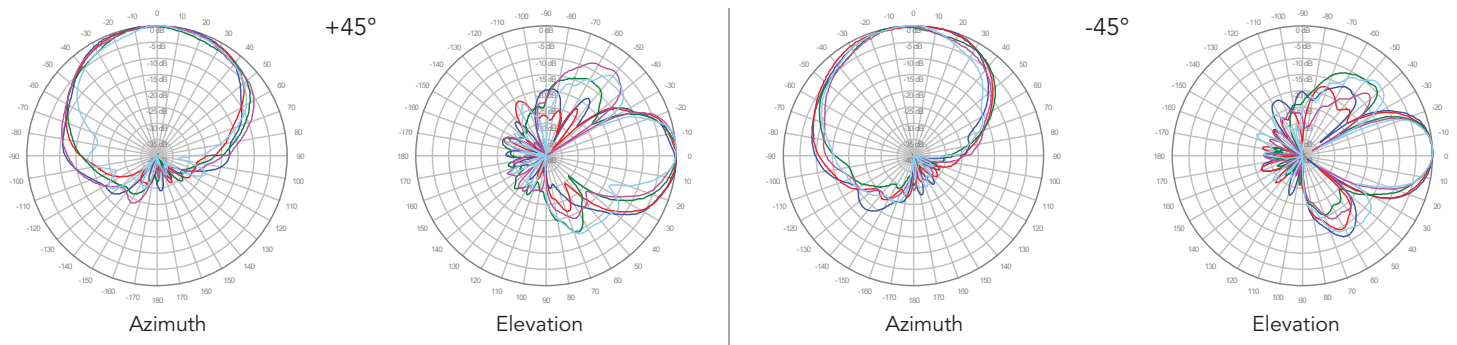
### Y1, 2° TILT



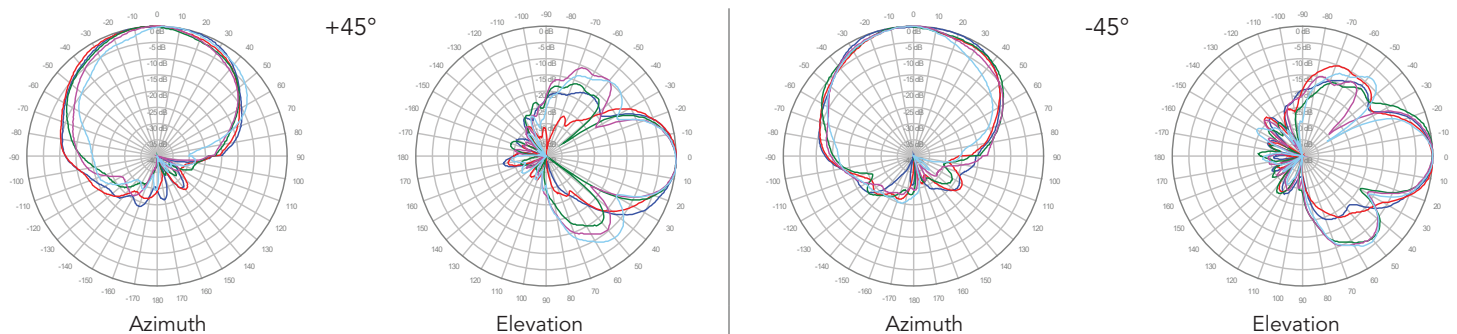
### Y2, 2° TILT



### Y3, 2° TILT



### Y4, 2° TILT

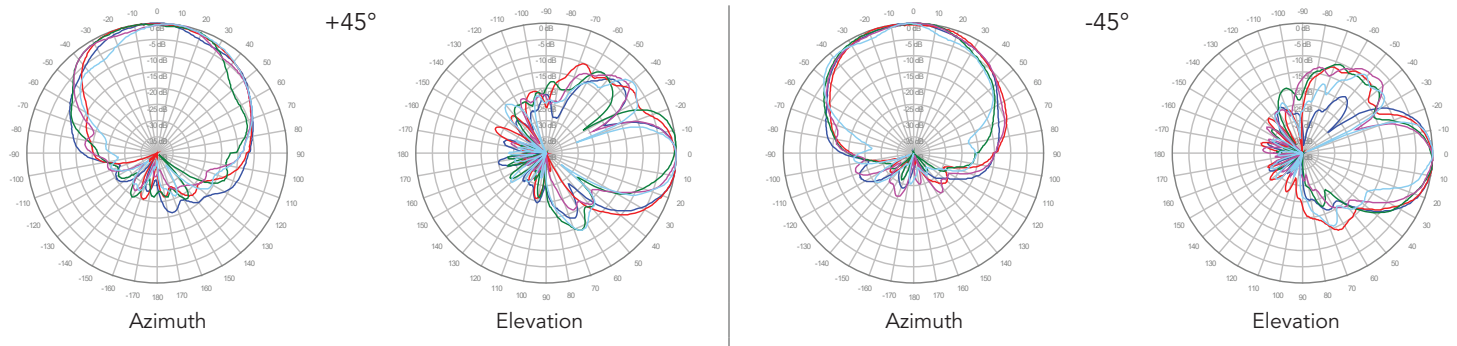


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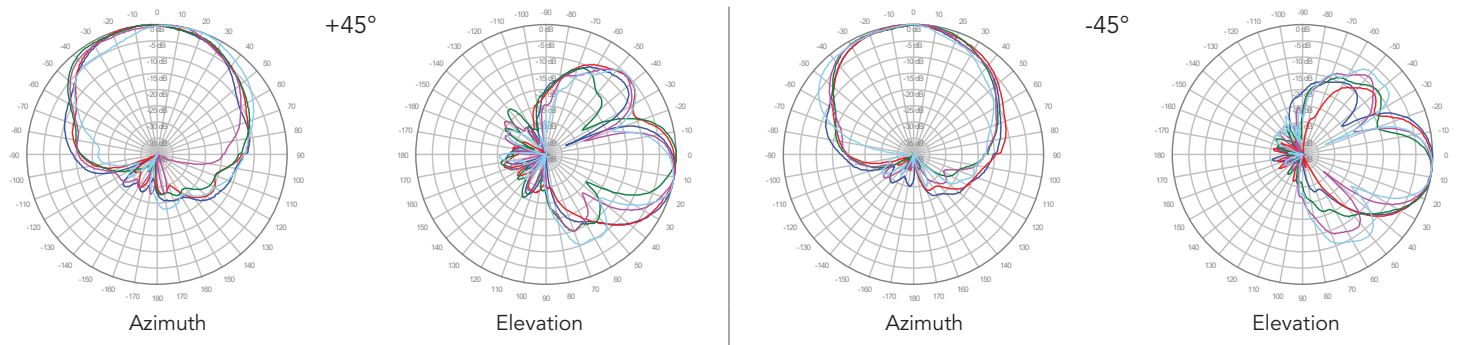
## 2C4U3MX065X06Fwxyso

1800 MHz —  
1900 MHz —  
2100 MHz —  
2300 MHz —  
2600 MHz —

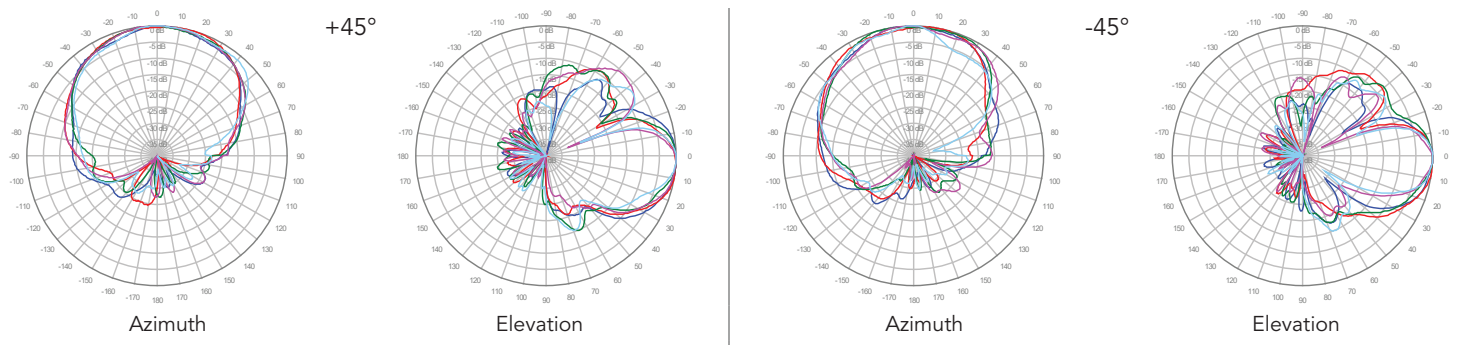
### Y1, 4° TILT



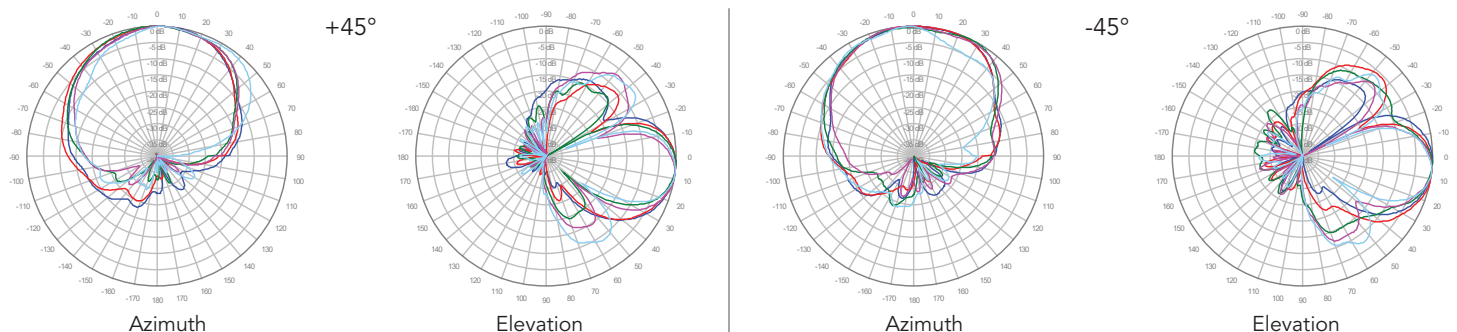
### Y2, 4° TILT



### Y3, 4° TILT



### Y4, 4° TILT



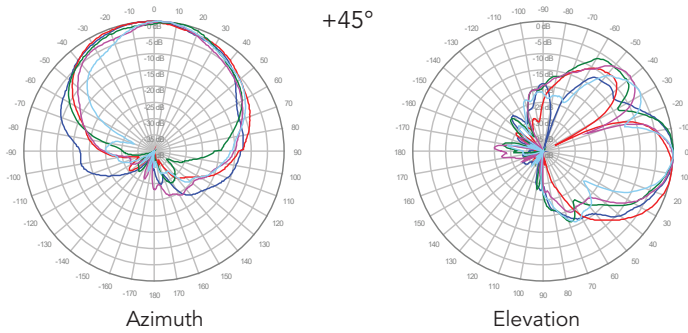
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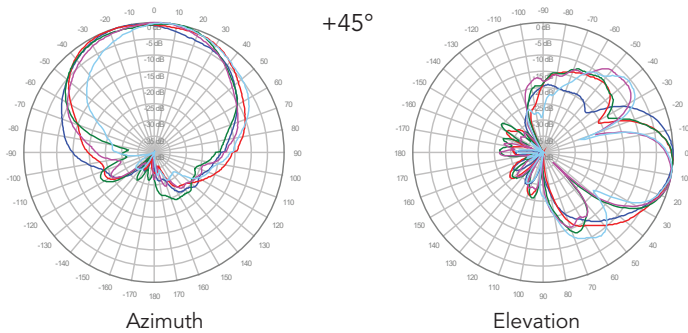
## 2C4U3MX065X06Fwxs0

1800 MHz —  
1900 MHz —  
2100 MHz —  
2300 MHz —  
2600 MHz —

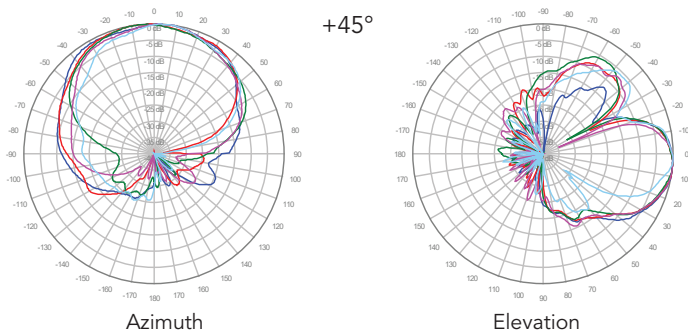
### Y1, 6° TILT



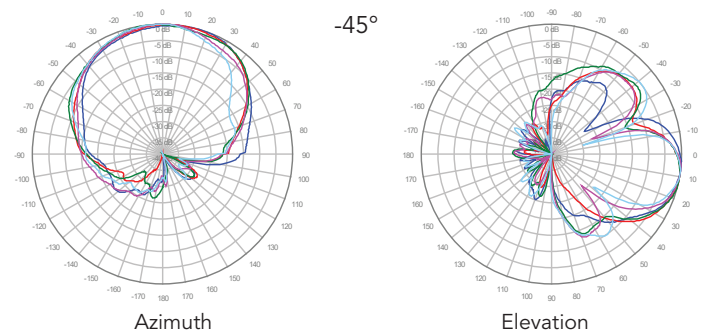
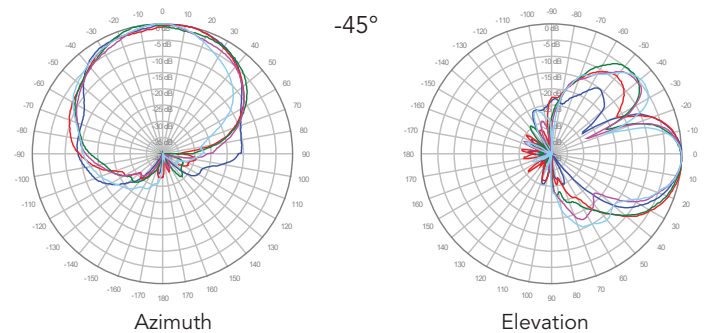
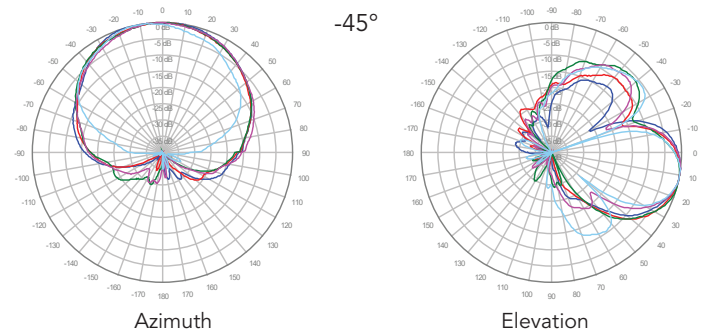
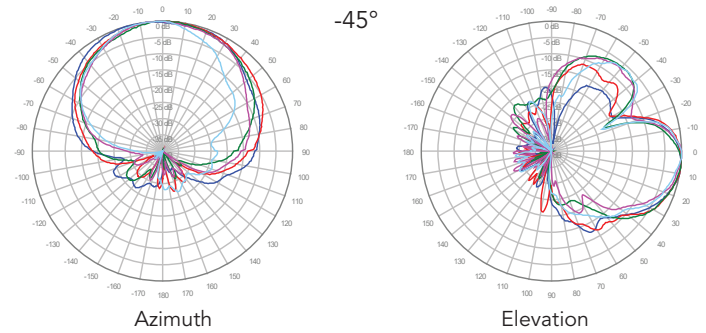
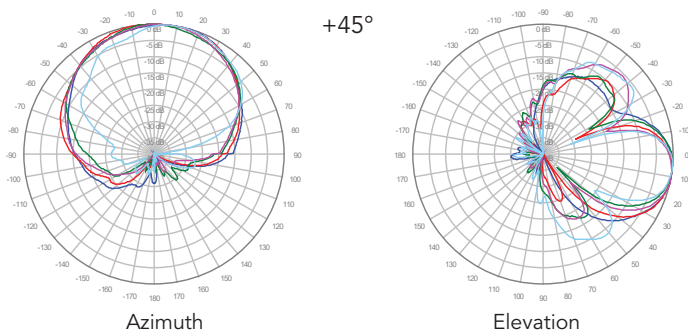
### Y2, 6° TILT



### Y3, 6° TILT



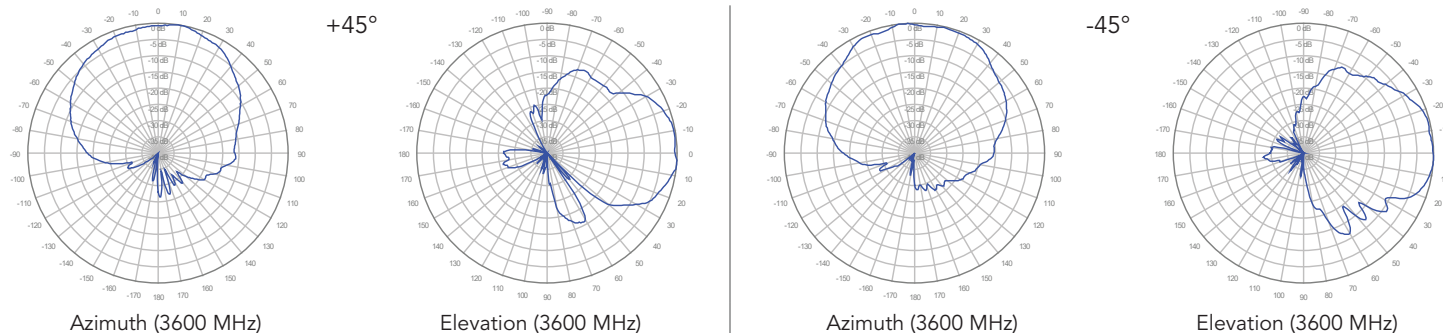
### Y4, 6° TILT



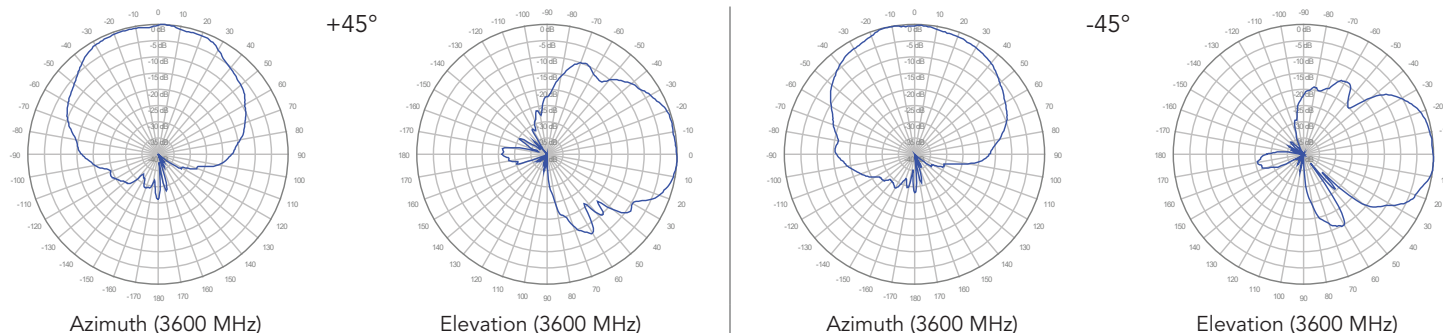
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## 2C4U3MX065X06Fwxs0

### P1, 0° TILT



### P2, 0° TILT



### O1, 0° TILT

