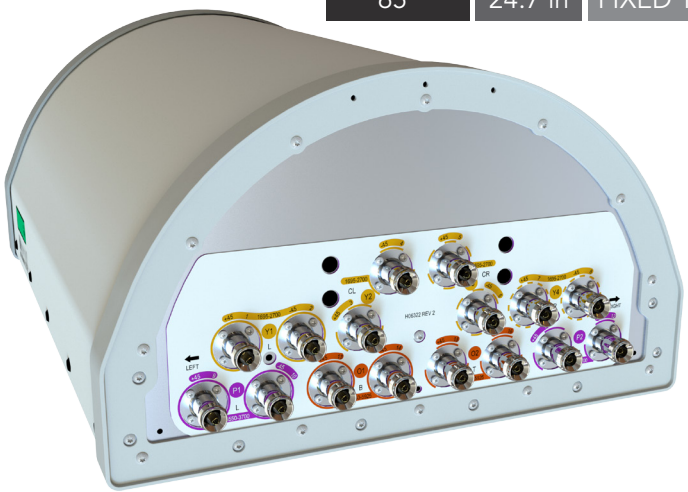
Amphenol ANTENNA SOLUTIONS

# 16-Port Panel Antenna

(4x) 1695-2700 | (2x) 3550-3700 | (2x) 5150-5925 MHz

65° | 24.7 in | FIXED TILT

## 4U4MX065X06Fxys0



### Features

- Fixed tilt panel antenna with 16 connectors
- Ultra-wide band performance
- Ideal solution for Small Cell applications
- This antenna meets the requirements of the U-NII

| PRODUCT OVERVIEW | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Frequency Range (MHz) | MID | | | | CBRS | | LAA | |
| | | (4x) 1695-2700 | | | | (2x) 3550-3700 | | (2x) 5150-5925 | |
| | Array | Y1 | Y2 | Y3 | Y4 | P1 | P2 | O1 | O2 |
| | Connector | 8 PORTS | | | | 4 PORTS | | 4 PORTS | |
| | Polarization | XPOL | | | | XPOL | | XPOL | |
| | Azimuth Beamwidth (avg) | 70° | | | | 40° | | 71° | |
| | Electrical Downtilt | 2°, 4°, 6° | | | | 0° | | 0° | |
| | Total Connector Count | 16 PORTS | | | | | | | |
| | Connector Type | 4.3-10 FEMALE | | | | | | | |
| | Dimensions | 628 x 462 x 268 mm (24.7 x 18.2 x 10.6) | | | | | | | |

**ELECTRICAL SPECIFICATIONS** Mid Band — **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 | 13.6 ± 0.8 | 14.1 ± 0.7 | 14.2 ± 0.7 | 14.7 ± 0.8 |
| | MAX | dBi | 14.4 | 14.8 | 14.9 | 15.5 |
| Azimuth Beamwidth (3 dB) | | degrees | 79.4° ± 15.7° | 78.8° ± 16.1° | 76.2° ± 14.7° | 67.9° ± 14.2° |
| Elevation Beamwidth (3 dB) | | degrees | 20.7° ± 2.5° | 19.8° ± 2.8° | 18.7° ± 2.4° | 15.5° ± 1.7° |
| Electrical Downtilt | | degrees | (x) 2°, 4°, 6° | | | |
| Impedance | | Ohms | 50Ω | | | |
| VSWR | | --- | ≤ 1.5:1 | | | |
| Passive Intermodulation 3rd Order for 2x20 W Carriers | | dBc | < -153 | | | |
| Upper Sidelobe Suppression | | dB | > 12 | | | |
| Maximum Power Per Port | | Watts | (8x) 300 W | | | |
| Isolation | Intraband | dB | 25 | 25 | 25 | 25 |
| | Interband | dB | 28 | 28 | 28 | 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.

# 4U4MX065X06Fxys0

| **ELECTRICAL SPECIFICATIONS** CBRS Band | | | ■ **P1** ■ **P2** |
|---|---|---|---|
| Frequency Range | | MHz | (2x) 3550-3700 |
| Polarization | | --- | (2x) ±45° |
| Gain | BASTA | dBi | 10.5 ± 0.8 |
| | MAX | dBi | 11.3 |
| Azimuth Beamwidth (3 dB) | | degrees | 40.4° ± 11.8° |
| Elevation Beamwidth (3 dB) | | degrees | 33.7° ± 4.5° |
| 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 |
| Maximum Power Per Port | | Watts | (4x) 300 W |
| Isolation | Intraband | dB | 25 |
| | Interband | dB | 28 |

| **ELECTRICAL SPECIFICATIONS** LAA Band | | | ■ **O1** ■ **O2** |
|---|---|---|---|
| Frequency Range | | MHz | (2x) 5150-5925 |
| Polarization | | --- | (2x) ±45° |
| Gain | BASTA | dBi | 4.1 ± 1.3 |
| | MAX | dBi | 5.4 |
| Azimuth Beamwidth (3 dB) | | degrees | 71.0° ± 15.3° |
| Elevation Beamwidth (3 dB) | | degrees | 23.2° ± 4.7° |
| Electrical Downtilt | | degrees | (y) 0° |
| Impedance | | Ohms | 50Ω |
| VSWR | | --- | ≤ 1.5:1 |
| Passive Intermodulation 3rd Order for 2x20 W Carriers | | dBm (dBc) | N/A |
| Upper Sidelobe Suppression | | dB | U-NII Compliant |
| Maximum Power Per Port | | Watts | (4x) 2 W |
| U-NII Compliant | | --- | Yes |
| Isolation | Intraband | dB | 25 |
| | Interband | dB | 28 |

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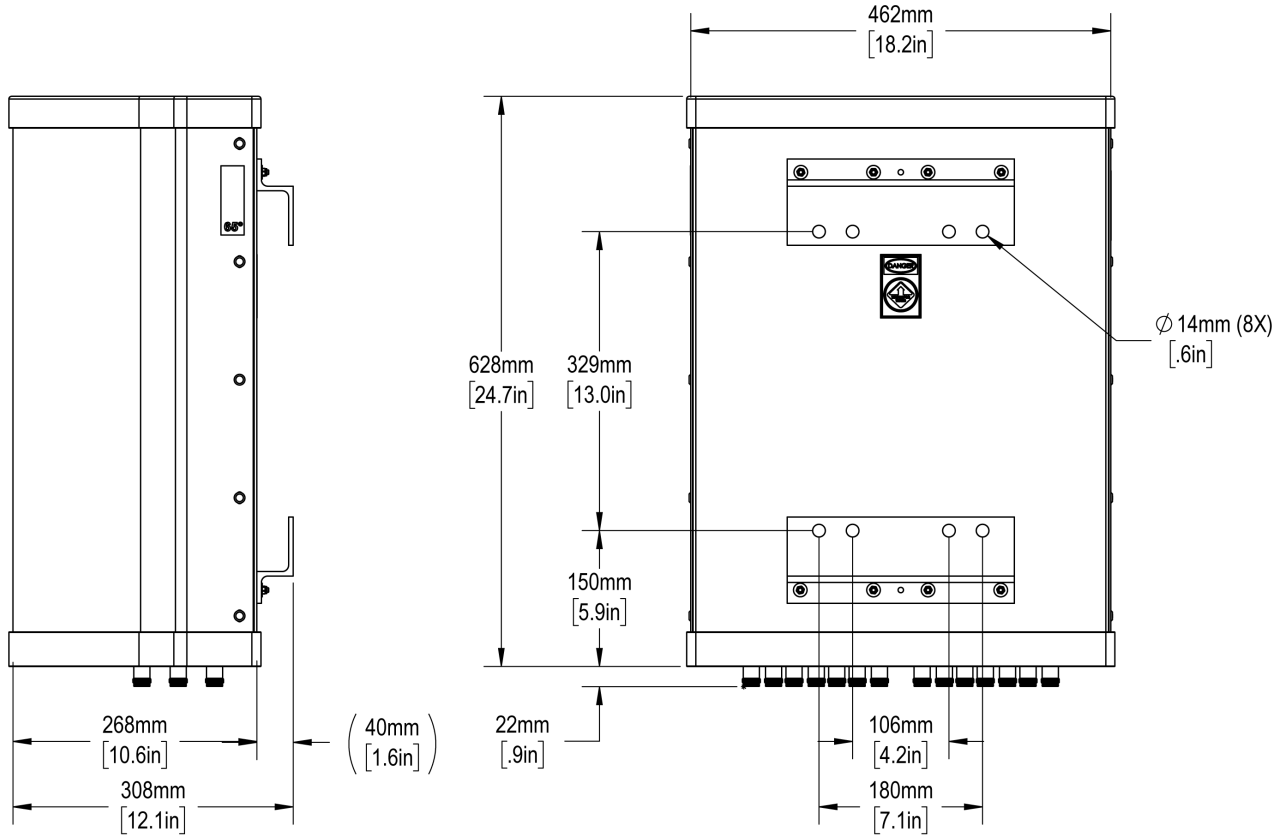
## MECHANICAL SPECIFICATIONS

| | | | | |
|---|---|---|---|---|
| Antenna | Length | | mm (in) | 628 (24.7) |
| | Width | | mm (in) | 462 (18.2) |
| | Depth | | mm (in) | 268 (10.6) |
| Net Weight - Antenna Only | | | kg (lbs) | 10.9 (24) |
| Windload | | Calculation | km/h (mph) | 160 (100) |
| | | Front | N (lbf) | 309 (69) |
| | | Side | N (lbf) | 144 (32) |
| Survival Wind Speed | | | km/h (mph) | 241 (150) |
| Wind Area | | Front | $m^2$ ($ft^2$) | 0.25 (2.7) |
| | | Side | $m^2$ ($ft^2$) | 0.11 (1.2) |
| Connector | | Type | --- | 4.3-10 Female |
| | | Quantity | --- | 16 |
| | | 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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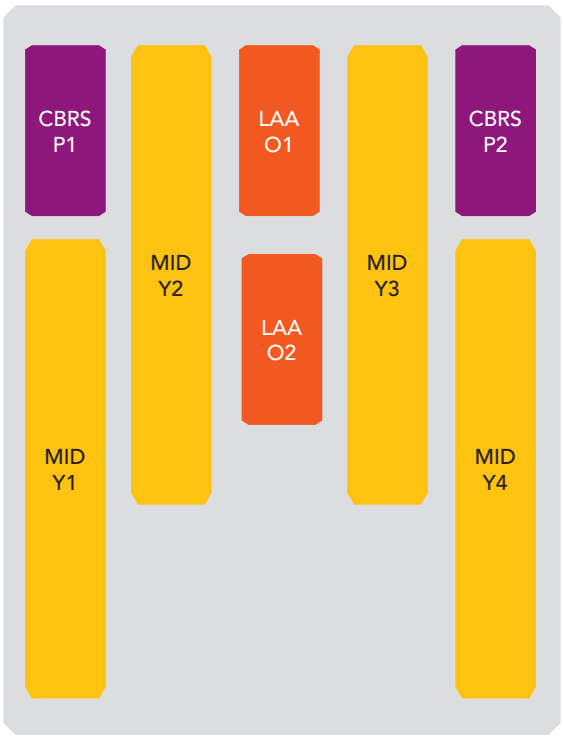
**ARRAY LAYOUT** Topology

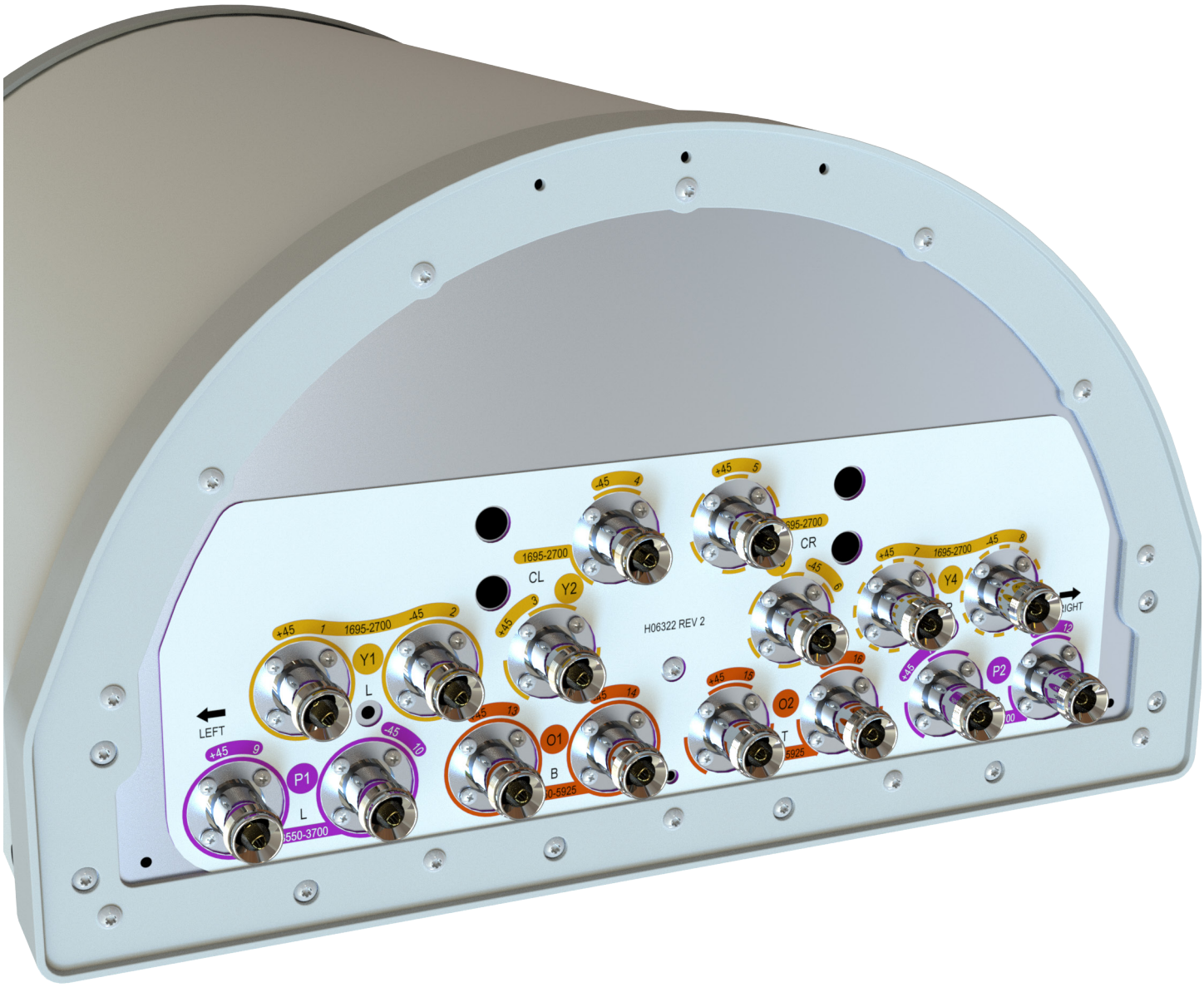
| FREQUENCY | | ARRAY | CONNECTOR | CONNECTOR TYPE |
|---|---|---|---|---|
| MID BAND | 1695-2700 | Y1 | 1-2 | (2x) 4.3-10 Female |
| | 1695-2700 | Y2 | 3-4 | (2x) 4.3-10 Female |
| | 1695-2700 | Y3 | 5-6 | (2x) 4.3-10 Female |
| | 1695-2700 | Y4 | 7-8 | (2x) 4.3-10 Female |
| CBRS BAND | 3550-3700 | P1 | 9-10 | (2x) 4.3-10 Female |
| | 3550-3700 | P2 | 11-12 | (2x) 4.3-10 Female |
| LAA BAND | 5150-5925 | O1 | 13-14 | (2x) 4.3-10 Female |
| | 5150-5925 | O2 | 15-16 | (2x) 4.310 Female |




*The illustration is not shown to scale.*

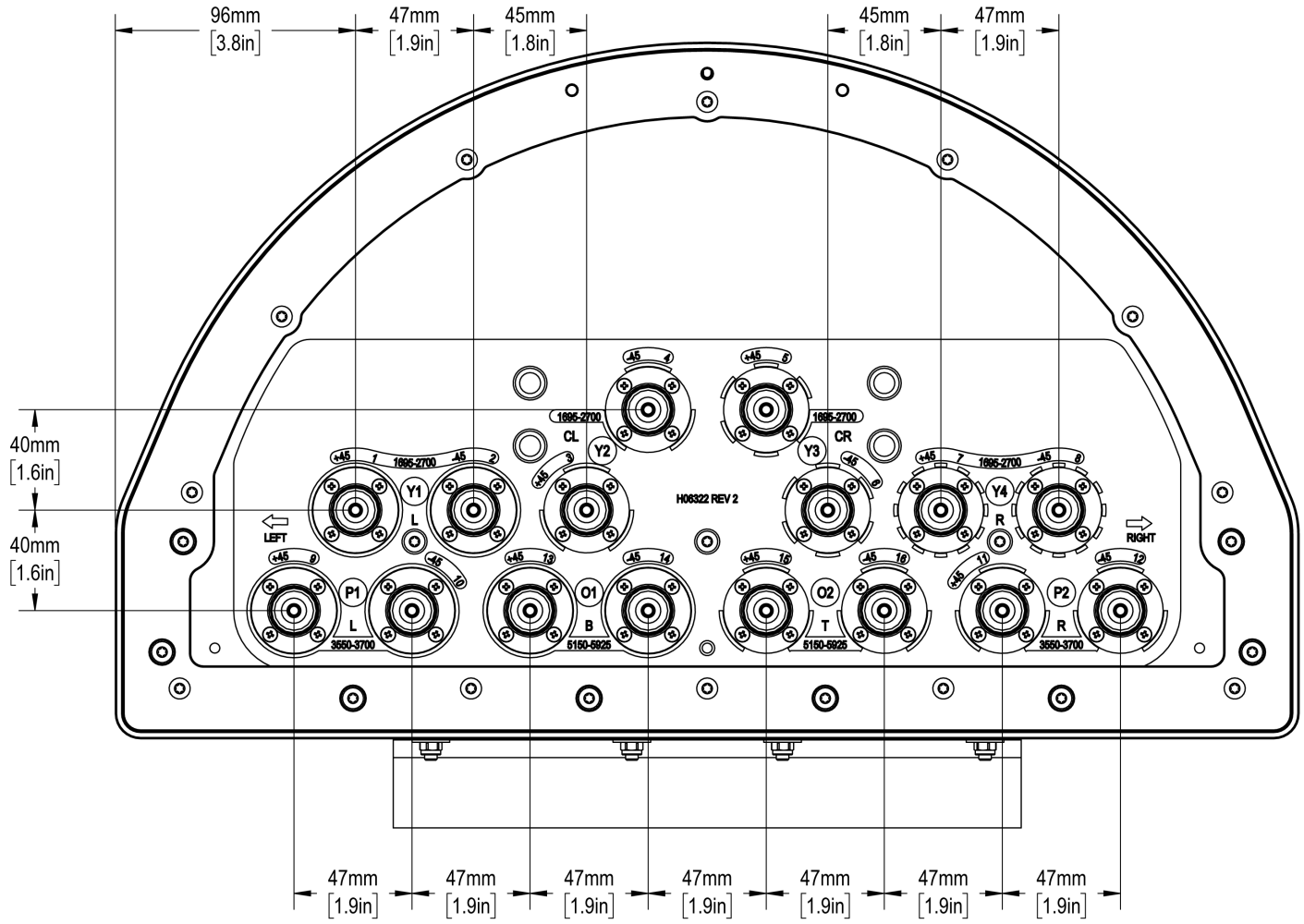
# 4U4MX065X06Fxys0

## BOTTOM VIEW - LABELING



# 4U4MX065X06Fxys0

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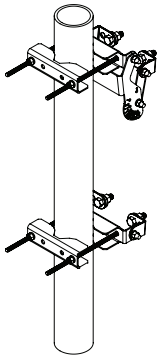
**MOUNTING KITS** Select from the following mounting options when ordering.

| MODEL NUMBER | DESCRIPTION | FITS PIPE DIAMETER | WEIGHT |
|---|---|---|---|
| 36210006  | 2-POINT, SCISSOR TILT, MOUNTING & DOWNTILT BRACKET KIT | 40-115 mm (1.57-4.5 in) | 4.1 kg (9 lbs) |

# 4U4MX065X06Fxys0

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

| NUMBER OF BANDS & OPERATING FREQUENCY | | | PATTERN TYPE | AZIMUTH BMWDTH | POLARIZA-TION | LENGTH | TILT TYPE | TILT OPTIONS | CONNECTOR TYPE | VARIATION | ORDERING OPTION |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 4U | 4M | | X | 065 | X | 06 | F | xy | s | 0 | -T |
| (4x) 1695-2700 | (2x) 3550-3700 | (2x) 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 -T to the end of the model number.<br><br>If -T is not added, the bracket kit can be added as a separate line item, or the antenna shipped without a bracket. |

## ORDERING OPTIONS Select from the following ordering options

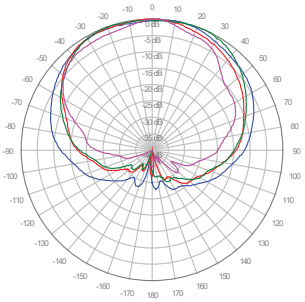
| SELECT MOUNTING KIT | SELECT DEGREE OF ELECTRICAL DOWNTILT FOR EACH BAND | | | ORDER MODEL NUMBER |
|---|---|---|---|---|
| | MID BAND | CBRS BAND | LAA BAND | |
| ANTENNA ONLY - NO MOUNTING KIT | 2° | 0° | 0° | 4U4MX065X06F20s0 |
| | 4° | 0° | 0° | 4U4MX065X06F40s0 |
| | 6° | 0° | 0° | 4U4MX065X06F60s0 |
| | Y1 & Y2 = 2°<br>Y3 & Y4 = 6° | 0° | 0° | 4U4MX065X06FAAs0 |
| | Y1 & Y2 = 2°<br>Y3 & Y4 = 4° | 0° | 0° | 4U4MX065X06FBBs0 |
| | Y1 & Y2 = 4°<br>Y3 & Y4 = 6° | 0° | 0° | 4U4MX065X06FCCs0 |
| ANTENNA WITH **36210006** MOUNTING KIT<br><br>2-Point, Scissor Tilt, Mounting & Downtilt Bracket Kit | 2° | 0° | 0° | 4U4MX065X06F20s0-T |
| | 4° | 0° | 0° | 4U4MX065X06F40s0-T |
| | 6° | 0° | 0° | 4U4MX065X06F60s0-T |
| | Y1 & Y2 = 2°<br>Y3 & Y4 = 6° | 0° | 0° | 4U4MX065X06FAAs0-T |
| | Y1 & Y2 = 2°<br>Y3 & Y4 = 4° | 0° | 0° | 4U4MX065X06FBBs0-T |
| | Y1 & Y2 = 4°<br>Y3 & Y4 = 6° | 0° | 0° | 4U4MX065X06FCCs0-T |

# 4U4MX065X06Fxys0

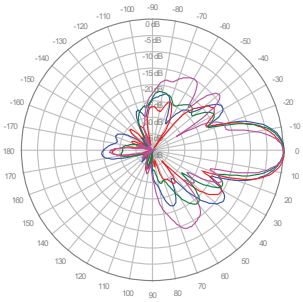
1800 MHz
1900 MHz
2100 MHz
2600 MHz

## Y1, 2° TILT

+45°

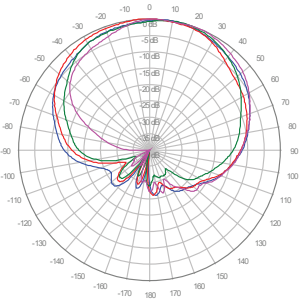


Azimuth

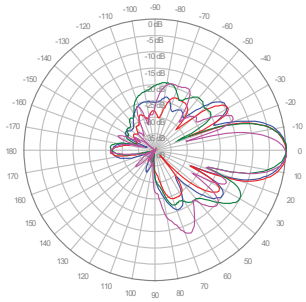


Elevation

-45°



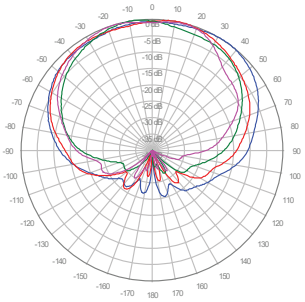
Azimuth



Elevation

## Y2, 2° TILT

+45°



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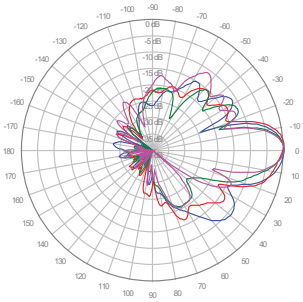
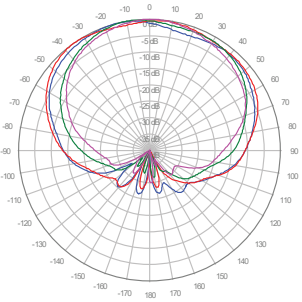
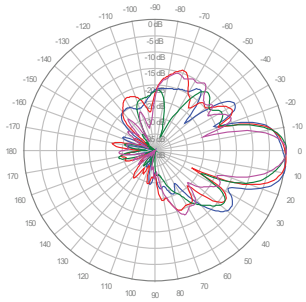


Elevation

-45°



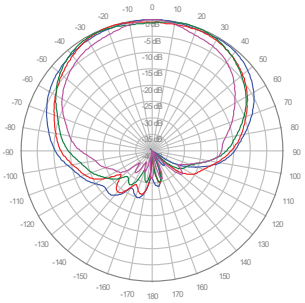
Azimuth



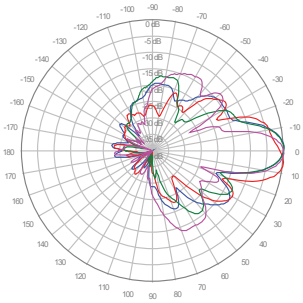
Elevation

## Y3, 2° TILT

+45°

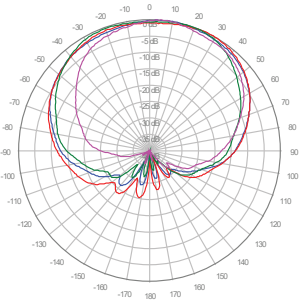


Azimuth



Elevation

-45°



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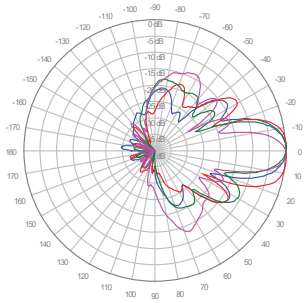
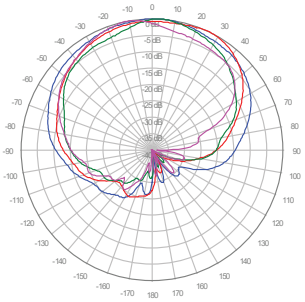


Elevation

## Y4, 2° TILT

+45°



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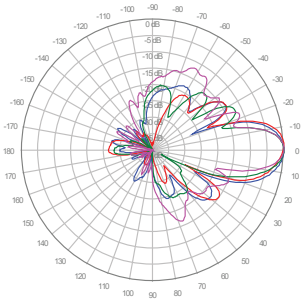
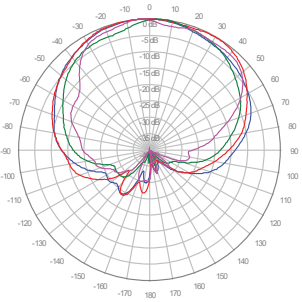
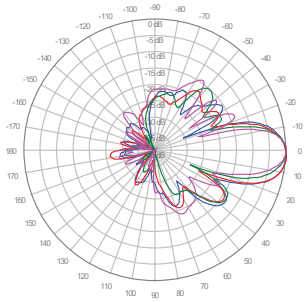


Elevation

-45°



Azimuth



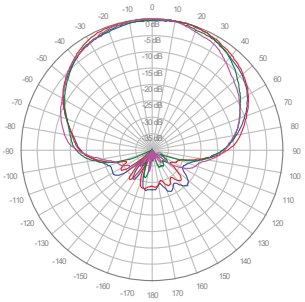
Elevation

# 4U4MX065X06Fxys0

1800 MHz
1900 MHz
2100 MHz
2600 MHz

## Y1, 4° TILT

+45°



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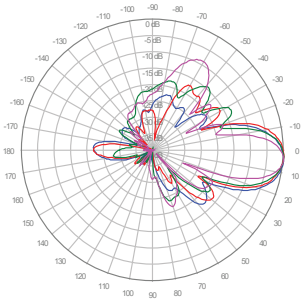
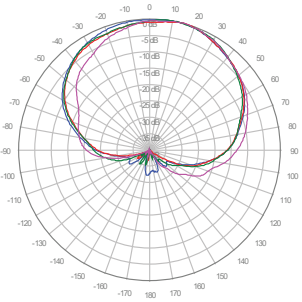


Elevation

-45°



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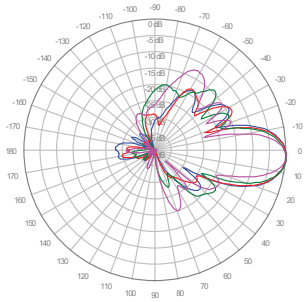
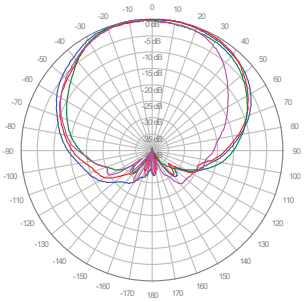


Elevation

## Y2, 4° TILT

+45°



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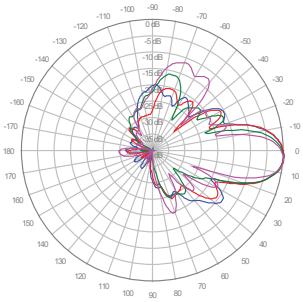
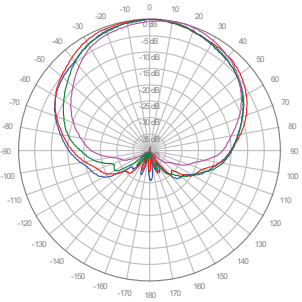


Elevation

-45°



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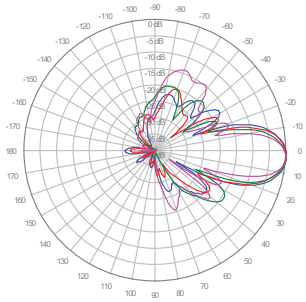
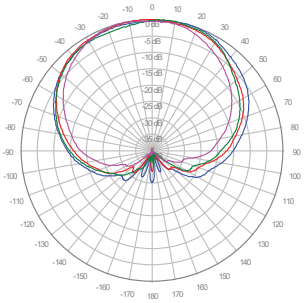


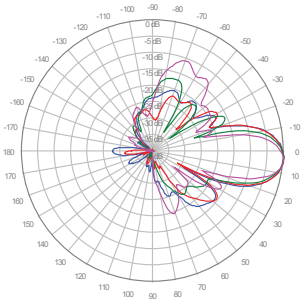
Elevation

## Y3, 4° TILT

+45°

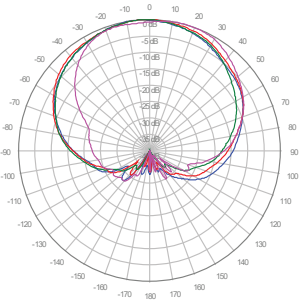


Azimuth

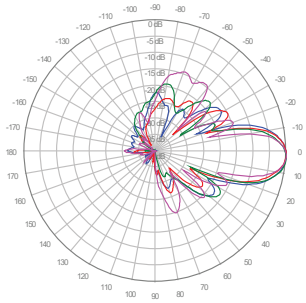


Elevation

-45°



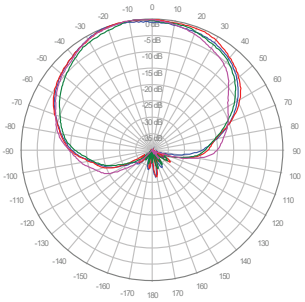
Azimuth



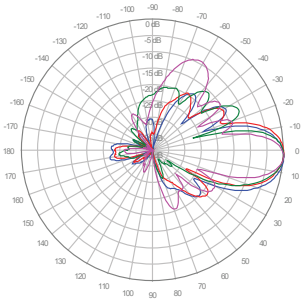
Elevation

## Y4, 4° TILT

+45°

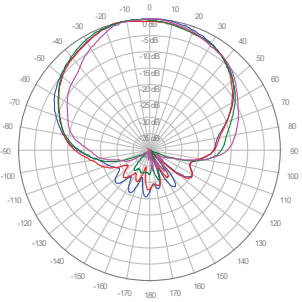


Azimuth

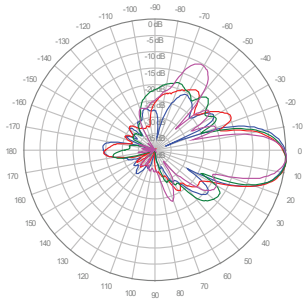


Elevation

-45°



Azimuth



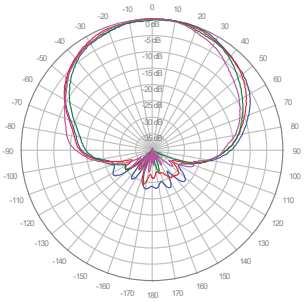
Elevation

# 4U4MX065X06Fxys0

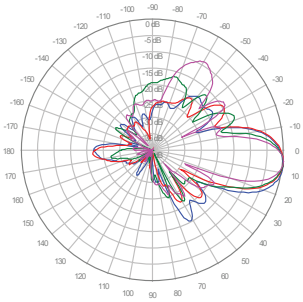
1800 MHz
1900 MHz
2100 MHz
2600 MHz

## Y1, 6° TILT

+45°

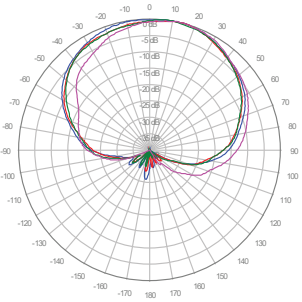


Azimuth

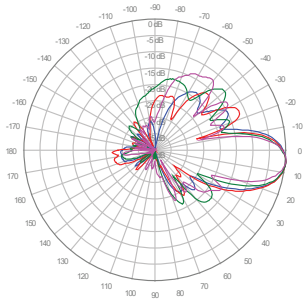


Elevation

-45°



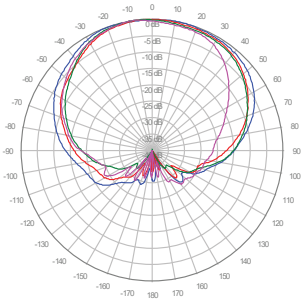
Azimuth



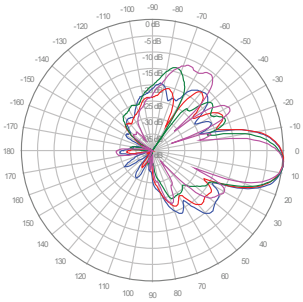
Elevation

## Y2, 6° TILT

+45°

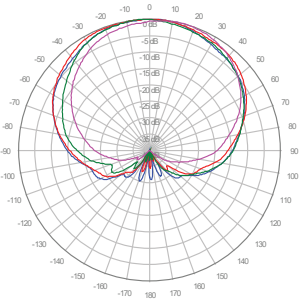


Azimuth

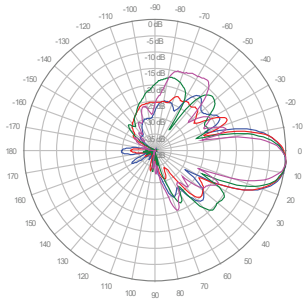


Elevation

-45°



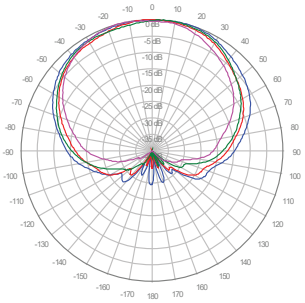
Azimuth



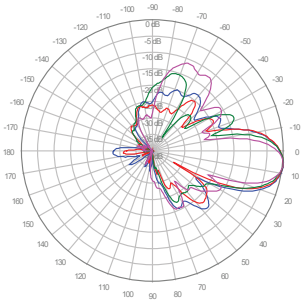
Elevation

## Y3, 6° TILT

+45°

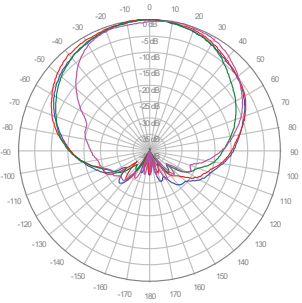


Azimuth

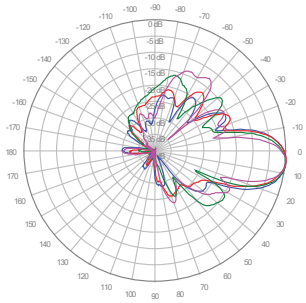


Elevation

-45°



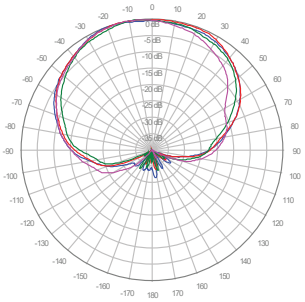
Azimuth



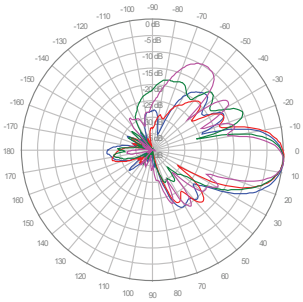
Elevation

## Y4, 6° TILT

+45°

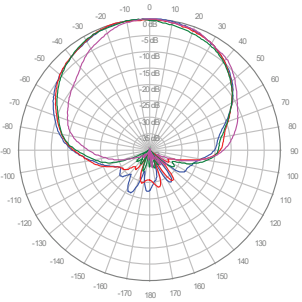


Azimuth

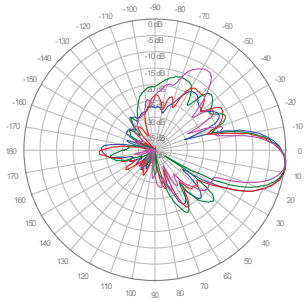


Elevation

-45°



Azimuth

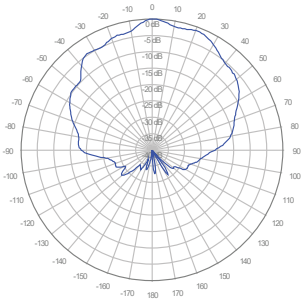


Elevation

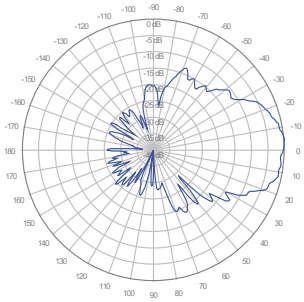
# 4U4MX065X06Fxys0

## P1, 0° TILT

+45°

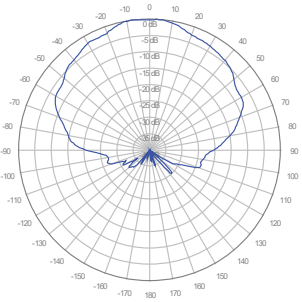


Azimuth (3600 MHz)

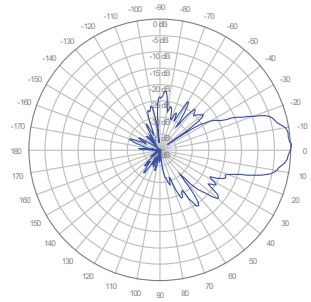


Elevation (3600 MHz)

-45°



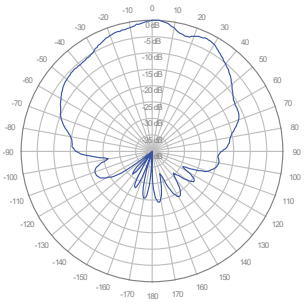
Azimuth (3600 MHz)



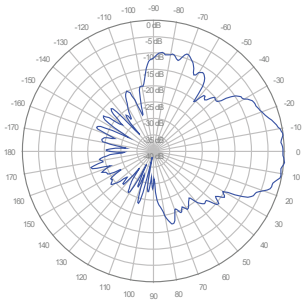
Elevation (3600 MHz)

## P2, 0° TILT

+45°

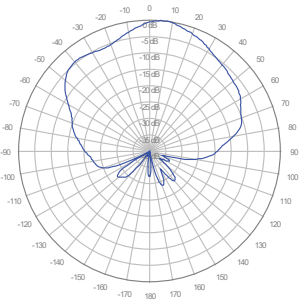


Azimuth (3600 MHz)

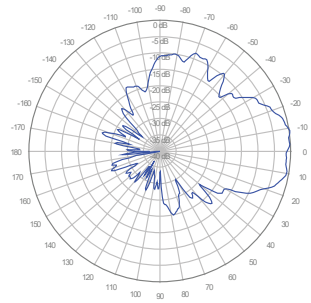


Elevation (3600 MHz)

-45°



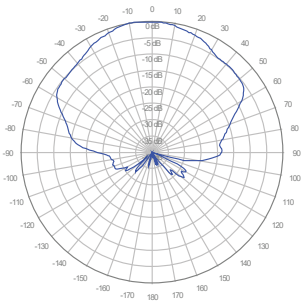
Azimuth (3600 MHz)



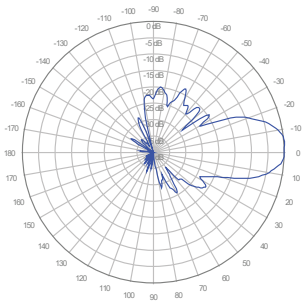
Elevation (3600 MHz)

## O1, 0° TILT

+45°

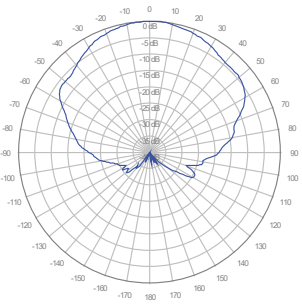


Azimuth (5600 MHz)

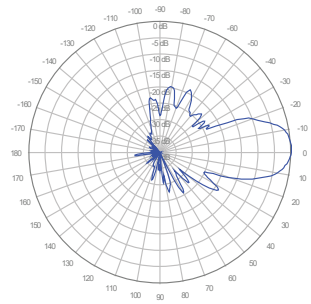


Elevation (5600 MHz)

-45°



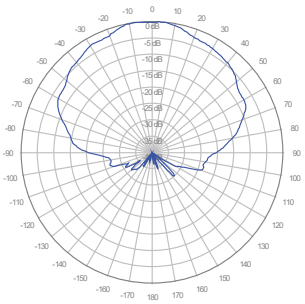
Azimuth (5600 MHz)



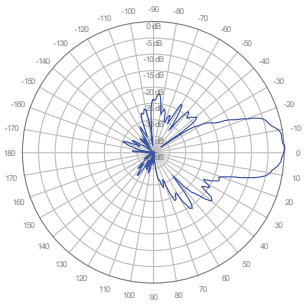
Elevation (5600 MHz)

## O2, 0° TILT

+45°

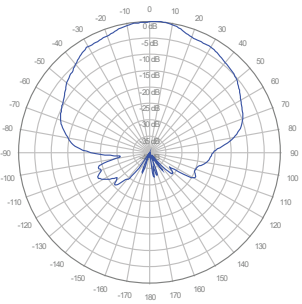


Azimuth (5600 MHz)

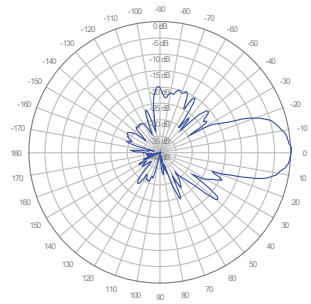


Elevation (5600 MHz)

-45°



Azimuth (5600 MHz)



Elevation (5600 MHz)