SINGLE SECTOR 24.6 IN FIXED TILT

# 2C4U3MS070X06Fwxys0

#### **Features**

- 4G/5G 70° single sector configuration with 18 connectors
- Ideal for multi-carrier or 4x4 MIMO deployments
- This antenna meets the requirements of the U-NII
- Available for order with a grey, brown or black radome



|          | [                       | LOW                             | BAND   | MID BAND       |      |      |      | CBRS BAND      |      | LAA BAND       |
|----------|-------------------------|---------------------------------|--------|----------------|------|------|------|----------------|------|----------------|
|          | Frequency Range (MHz)   | (2x) 69                         | 96-960 | (4x) 1695-2700 |      |      |      | (2x) 3550-3700 |      | (1x) 5150-5925 |
|          | Array                   | ■ R1                            | ■ R2   | Y1             | ■ Y2 | ■ Y3 | ■ Y4 | ■ P1           | ■ P2 | <b>O</b> 1     |
| M ≤      | Connector               | 4 PORTS                         |        | 8 PORTS        |      |      |      | 4 PORTS        |      | 2 PORTS        |
| I.K      | Polarization            | XPOL                            |        | XPOL           |      |      |      | XPOL           |      | XPOL           |
| OVERVIEW | Azimuth Beamwidth (avg) | 80°                             |        | 70°            |      |      |      | 70°            |      | 70°            |
|          | Electrical Downtilt     | 0°                              |        | 2°, 4°, 6°     |      |      |      | 0°             |      | 0°             |
| PRODUCT  | Configuration           | SINGLE SECTOR CONFIGURATION     |        |                |      |      |      |                |      |                |
| PRC      | Total Connector Count   | 18 PORTS                        |        |                |      |      |      |                |      |                |
|          | Connector Type          | 4.3-10 FEMALE                   |        |                |      |      |      |                |      |                |
|          | Dimensions              | 625 x Ø371 mm (24.6 x Ø14.6 in) |        |                |      |      |      |                |      |                |
|          | Radome Color Options    | GREY, BROWN or BLACK            |        |                |      |      |      |                |      |                |

| AL SPECIFICATIONS                  | Low Band  | ■ R1 ■ R2  |   |  |  |  |
|------------------------------------|---|--|---|--|--|--|
| Range                              | MHz   | (2x) 6   | 96-960                                      |  |  |  |
| Sub-Range                          | MHz   | 696-806 806-960  |   |  |  |  |
|                                    |   | (2x) ±45°  |   |  |  |  |
| BASTA                              | dBi   | 7.6 ± 0.7  | 7.2 ± 1.1                                   |  |  |  |
| MAX                                | dBi   | 8.3  | 8.3   |  |  |  |
| amwidth (3 dB)                     | degrees   | 83.8° ± 8.6°   | 77.9° ± 21.3°                               |  |  |  |
| eamwidth (3 dB)                    | degrees   | 79.4° ± 11.5°  | 80.1° ± 17.4°                               |  |  |  |
| owntilt                            | degrees   | (w) 0°   |   |  |  |  |
|                                    | Ohms  | 50Ω  |   |  |  |  |
|                                    |   | ≤ 1.5:1  |   |  |  |  |
| ermodulation<br>or 2x20 W Carriers | dBc   | < -153   |   |  |  |  |
| lobe Suppression                   | dB  | N/A  |   |  |  |  |
| Front-to-Back Ratio                |   | > 17 > 13  |   |  |  |  |
| Intraband                          | dB  | > 25   |   |  |  |  |
| Interband                          | dB  | >  | 28  |  |  |  |
| r                                  | Watts   | 500W   |   |  |  |  |
|                                    | Range Sub-Range  BASTA MAX  amwidth (3 dB)  eamwidth (3 dB)  owntilt  rmodulation or 2x20 W Carriers lobe Suppression ck Ratio  Intraband Interband | BASTA dBi MAX dBi amwidth (3 dB) degrees eamwidth (3 dB) degrees owntilt degrees  Ohms  rmodulation or 2x20 W Carriers lobe Suppression dB Intraband dB Interband dB  Interband dB | Range   MHz   696-806       (2x)       (2x) |  |  |  |



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| ELECTRIC                   | AL SPECIFICATIONS                  | Mid Band |                           | ■ Y1 ■ Y2      | ■ Y3 ■ Y4     |               |  |  |  |
|----------------------------|------------------------------------|----------|---------------------------|----------------|---------------|---------------|--|--|--|
| Frequency                  | Range                              | MHz      | (4x) 16                   | (4x) 1695-2700 |               |               |  |  |  |
| Frequency                  | Sub-Range                          | MHz      | 1695-1880                 | 1850-1990      | 1920-2200     | 2300-2700     |  |  |  |
| Polarization               | 1                                  |          | (4x) ±45°                 |                |               |               |  |  |  |
| Gain                       | BASTA                              | dBi      | 11.0 ± 0.6                | 10.6 ± 0.9     | 10.7 ± 1.0    | 11.2 ± 0.9    |  |  |  |
|                            | MAX                                | dBi      | 11.6                      | 11.5           | 11.7          | 12.1          |  |  |  |
| Azimuth Be                 | amwidth (3 dB)                     | degrees  | 72.7° ± 9.4°              | 76.3° ± 8.0°   | 71.0° ± 13.2° | 54.9° ± 11.5° |  |  |  |
| Elevation Beamwidth (3 dB) |                                    | degrees  | 35.8° ± 4.5° 34.1° ± 4.4° |                | 32.8° ± 5.0°  | 28.4° ± 4.6°  |  |  |  |
| Electrical D               | owntilt                            | degrees  | (x) 2°, 4°, 6°            |                |               |               |  |  |  |
| Impedance                  |                                    | Ohms     | 50Ω                       |                |               |               |  |  |  |
| VSWR                       |                                    |          | ≤ 1.5:1                   |                |               |               |  |  |  |
|                            | ermodulation<br>or 2x20 W Carriers | dBc      | < -153                    |                |               |               |  |  |  |
| Upper Side                 | lobe Suppression                   | dB       | N/A                       |                |               |               |  |  |  |
| Front-to-Ba                | ck Ratio                           | dB       | > 19 > 19                 |                | > 20          | >20           |  |  |  |
| 1 1 2                      | Intraband                          | dB       | > 25                      |                |               |               |  |  |  |
| Isolation                  | Interband                          | dB       | > 28                      |                |               |               |  |  |  |
| Input Powe                 | r                                  | Watts    | 300W                      |                |               |               |  |  |  |

| ELECTRIC        | AL SPECIFICATIONS                 | CBRS Band | ■ P1 ■ P2       |
|-----------------|-----------------------------------|-----------|-----------------|
| Frequency Range |                                   | MHz       | (2x) 3550-3700  |
| Polarization    | Polarization                      |           | (2x) ±45°       |
| - ·             | BASTA                             | dBi       | 9.0 ± 0.4       |
| Gain            | MAX                               | dBi       | 9.4             |
| Azimuth Be      | Azimuth Beamwidth (3 dB)          |           | 55.3° ± 6.0°    |
| Elevation B     | Elevation Beamwidth (3 dB)        |           | 40.8° ± 5.6°    |
| Electrical D    | Electrical Downtilt               |           | ( <b>y</b> ) 0° |
| Impedance       | Impedance                         |           | 50Ω             |
| VSWR            |                                   |           | ≤ 1.5:1         |
|                 | rmodulation<br>or 2x20 W Carriers | dBc       | N/A             |
| Upper Side      | obe Suppression                   | dB        | N/A             |
| Front-to-Ba     | ck Ratio                          | dB        | > 24            |
| la alatia a     | Intraband                         | dB        | > 25            |
| Isolation       | Interband                         | dB        | > 28            |
| Input Powe      | Input Power                       |           | 100W            |



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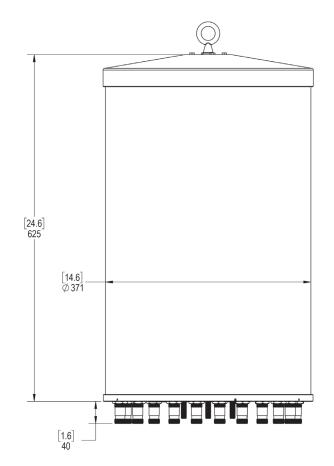
| ELECTRICAL SPECIFICATIONS LAA Band |                                    |         | <b>O</b> 1  |
|------------------------------------|------------------------------------|---------|---|
| Frequency Range                    |                                    | MHz     | (1x) 5150-5925  |
| Polarization                       |                                    |         | (1x) ±45°   |
| 6                                  | BASTA                              | dBi     | 5.4 ± 0.9   |
| Gain                               | MAX                                | dBi     | 6.3   |
| Azimuth Be                         | amwidth (3 dB)                     | degrees | 56.4° ± 26.3°   |
| Elevation B                        | eamwidth (3 dB)                    | degrees | 21.6° ± 2.8°  |
| Electrical D                       | owntilt                            | degrees | ( <b>y</b> ) 0°   |
| Impedance                          | Impedance                          |         | 50Ω   |
| VSWR                               |                                    |         | ≤ 1.5:1   |
|                                    | ermodulation<br>or 2x20 W Carriers | dBc     | N/A   |
| Upper Side                         | lobe Suppression                   | dB      | Meets FCC requirements upper pattern control for use in LAA outdoor network |
| Front-to-Ba                        | ck Ratio                           | dB      | > 30  |
| In day,                            | Intraband                          | dB      | > 25  |
| Isolation                          | Interband                          | dB      | > 28  |
| Input Powe                         | r                                  | Watts   | 50W   |
| U-NII Com                          | oliant                             |         | Yes   |

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#### **MECHANICAL SPECIFICATIONS**

| Antenna              | Height                    |             | mm (in)    | 625 (24.6)  |  |  |  |
|----------------------|---------------------------|-------------|------------|---|--|--|--|
| Ante                 | Diameter                  |             | mm (in)    | 371 (14.6)  |  |  |  |
| Net W                | Net Weight - Antenna Only |             | kg (lbs)   | 10.9 (24.0)   |  |  |  |
| Windload Calculation |                           | Calculation | km/h (mph) | 160 (100)   |  |  |  |
| vvinai               | oad                       | Frontal     | N (lbf)    | 191 (43)  |  |  |  |
| Surviv               | Survival Wind Speed       |             | km/h (mph) | 241 (150)   |  |  |  |
| Wind                 | Wind Area                 |             | m² (ft²)   | 0.22 (2.4)  |  |  |  |
| Volum                | Volume                    |             | m³ (ft³)   | 0.07 (2.3)  |  |  |  |
|                      |                           | Туре        |            | 4.3-10 Female   |  |  |  |
| Conne                | ector                     | Quantity    |            | 18  |  |  |  |
|                      |                           | Position    |            | Bottom  |  |  |  |
| Rador                | Radome Color              |             |            | Grey (Pantone 420 C),<br>Brown (Pantone 476 C),<br>Black (RAL 9011) |  |  |  |
| Lightr               | ning Protection (Groun    | nding Type) |            | Direct Ground   |  |  |  |
|                      |                           |             |            |   |  |  |  |

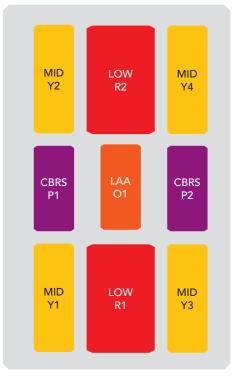


SINGLE SECTOR 24.6 IN FIXED TILT

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#### ARRAY LAYOUT Topology

| FREQUENCY  |           | ARRAY      | CONNECTOR | CONNECTOR TYPE     |
|------------|-----------|------------|-----------|--------------------|
| LOW BAND   | 696-960   | ■ R1       | 1-2       | (2x) 4.3-10 Female |
| LOW BAIND  | 696-960   | ■ R2       | 3-4       | (2x) 4.3-10 Female |
|            | 1695-2700 | ■ Y1       | 5-6       | (2x) 4.3-10 Female |
| MID BAND   | 1695-2700 | ■ Y2       | 7-8       | (2x) 4.3-10 Female |
| MID BAND   | 1695-2700 | ■ Y3       | 9-10      | (2x) 4.3-10 Female |
|            | 1695-2700 | ■ Y4       | 11-12     | (2x) 4.3-10 Female |
| CBRS BAND  | 3550-3700 | ■ P1       | 13-14     | (2x) 4.3-10 Female |
| CBK2 BAIND | 3550-3700 | ■ P2       | 15-16     | (2x) 4.3-10 Female |
| LAA BAND   | 5150-5925 | <b>O</b> 1 | 17-18     | (2x) 4.3-10 Female |



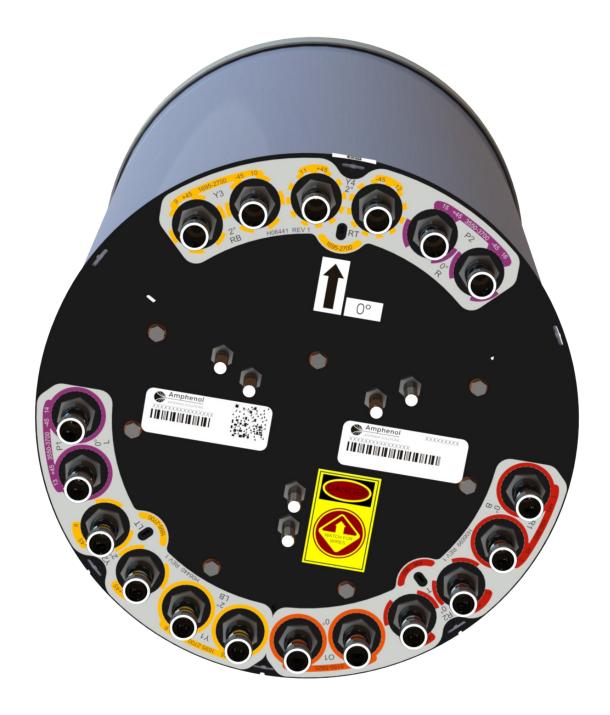
The illustration is not shown to scale.



SINGLE SECTOR 24.6 IN FIXED TILT

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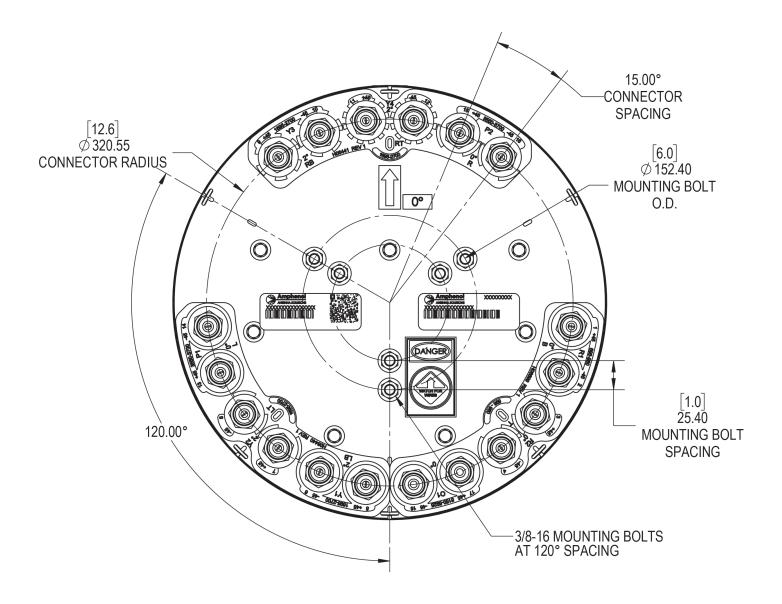
**BOTTOM VIEW - LABELING** 



SINGLE SECTOR 24.6 IN FIXED TILT

### 2C4U3MS070X06Fwxys0

#### **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.

SINGLE SECTOR 24.6 IN

# 2C4U3MS070X06Fwxys0

| MOUNTING KITS S | 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. |  |  |  |  |  |  |  |



SINGLE SECTOR 24.6 IN

# 2C4U3MS070X06Fwxys0

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

|                     | MBER OI<br>ERATING    |                       |                       | PATTERN<br>TYPE  | AZIMUTH<br>BMWDTH | POLARIZA-<br>TION | LENGTH        | TILT<br>TYPE  | TILT<br>OPTIONS  | CONNECTOR<br>TYPE   | VARIATION             | RADOME COLOR<br>OPTIONS  |
|---------------------|-----------------------|-----------------------|-----------------------|------------------|-------------------|-------------------|---------------|---------------|--|---------------------|-----------------------|--|
| 2C                  | 4U                    | 3                     | M                     | S                | 070               | X                 | 06            | F             | wxy  | S                   | 0                     | BK<br>BR   |
| (2x)<br>696-<br>960 | (4x)<br>1695-<br>2700 | (2x)<br>3550-<br>3700 | (1x)<br>5150-<br>5925 | Single<br>Sector | ~70°              | XPOL              | 0.6<br>meters | Fixed<br>Tilt | These letters are placeholders for fixed tilt options.  Refer to Electrical Specifications for available tilt options. | 4.3-10<br>Connector | Original<br>Variation | 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                 | SELECT   | ORDER    |           |          |  |
|------------------------|----------|----------|-----------|----------|--|
| RADOME COLOR           | LOW BAND | MID BAND | CBRS BAND | LAA BAND | MODEL NUMBER                           |
|                        | 0°       | 2°       | 0°        | 0°       | 2C4U3MS070X06F <b>020</b> s0           |
| Grey<br>Pantone 420 C  | 0°       | 4°       | 0°        | 0°       | 2C4U3MS070X06F <b>040</b> s0           |
|                        | 0°       | 6°       | 0°        | 0°       | 2C4U3MS070X06F <b>060</b> s0           |
|                        | 0°       | 2°       | 0°        | 0°       | 2C4U3MS070X06F <b>020</b> s0BR         |
| Brown<br>Pantone 476 C | 0°       | 4°       | 0°        | 0°       | 2C4U3MS070X06F <b>040</b> s0 <b>BR</b> |
|                        | 0°       | 6°       | 0°        | 0°       | 2C4U3MS070X06F <b>060</b> s0BR         |
|                        | 0°       | 2°       | 0°        | 0°       | 2C4U3MS070X06F <b>020</b> s0 <b>BK</b> |
| Black<br>RAL 9011      | 0°       | 4°       | 0°        | 0°       | 2C4U3MS070X06F <b>040</b> s0 <b>BK</b> |
|                        | 0°       | 6°       | 0°        | 0°       | 2C4U3MS070X06F <b>060</b> s0BK         |

### 18-Port Canister Antenna

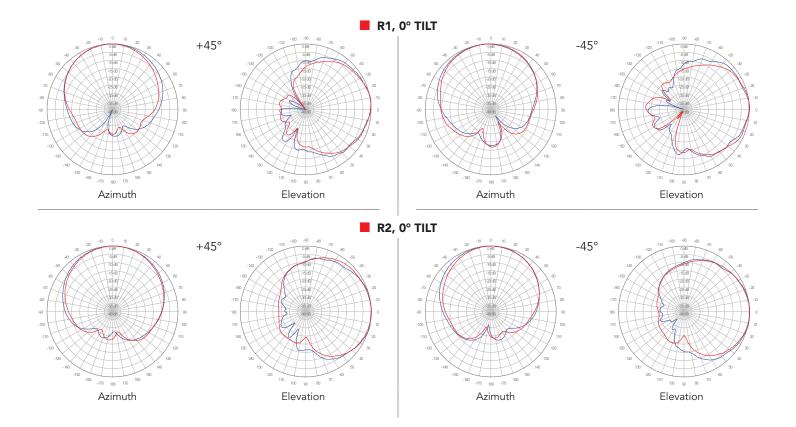
(2x) 696-960 | (4x) 1695-2700 | (2x) 3550-3700 | (1x) 5150-5925 MHz

SINGLE SECTOR 24.6 IN

### FIXED TILT 750 MHz

850 MHz

# 2C4U3MS070X06Fwxys0





### SINGLE SECTOR 24.6 IN FIXED TILT

1800 MHz

1900 MHz

# 2C4U3MS070X06Fwxys0





#### SINGLE SECTOR 24.6 IN FIXED TILT

1800 MHz

1900 MHz

# 2C4U3MS070X06Fwxys0





### SINGLE SECTOR 24.6 IN FIXED TILT

1800 MHz

1900 MHz

# 2C4U3MS070X06Fwxys0



SINGLE SECTOR 24.6 IN FIXED TILT

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