

## CYL-QAP-2

Small Cell Antenna, Quad 1695-2180MHz, 2FT

- X-Pol Small Cell
- Suitable for Pole or Building mount
- Broadband Radiators (AWS-3)
- Internal Beam combining
- Integrated Global Position System (GPS) option
- Suitable for AWS/PCS/LTE/Neutral Host
- Possible to deploy 4x4 MIMO application in HB



## ELECTRICAL SPECIFICATIONS

Frequency Band, MHz	2 x 1695-2180
Polarization	+/-45°
Electrical Down Tilt	0°
VSWR/Return Loss, dB, Maximum	1.5:1/14.0
Isolation Between Ports, dB, Minimum	28
Intermodulation (2x20w), IM3, dBc, Maximum	-153
Impedance, ohms	50
Maximum Power Per Connector, CW (w)	125

## MECHANICAL SPECIFICATIONS

Dimensions, Height/Diameter	24.2/15.1 in (613/384 mm)
Antenna RF Connector Type	7/16 DIN Female
Antenna RF Connector Torque	DIN 220-265 lbf-in (23-30 N-m)
GPS Connector Type	Mini DIN Female (4.1-9.5 per IEC 61169-4)
GPS Connector Torque	Mini-DIN 88.5 lbf-in (10 Nm)
Connector Location	Bottom
Radome Material	PVC
Wind Survival	150 mph (241 km/h)
Front Wind Load	45.9 lbf (204.18N) @100mph
Equivalent Flat Plate	0.91 sq-ft (c=2) @ 100mph

## ELECTRICAL SPECIFICATIONS (based on Antenna configuration)

Antenna Model	No. of beams	1695-1880		1850-1990		1920-2180	
		H-Beam V-Beam	Gain (dBi)	H-Beam V-Beam	Gain (dBi)	H-Beam V-Beam	Gain (dBi)
CYL-QAP-2-C	1	*360° 16.7°	8.7	*360° 15.3°	9.2	*360° 14.5°	9.8
CYL-QAP-2-H	1	*240° 17.6°	10.0	*240° 15.5°	10.6	*240° 14.8°	11.2
CYL-QAP-2-P	1	*180° 17.2°	10.4	*180° 16.3°	10.3	*180° 15.5°	10.5
CYL-QAP-2-T	3	66.0° 16.8°	14.0	62.4° 15.4°	14.4	59° 14.6°	15.0
CYL-QAP-2-B	2	68.9° 17.1°	13.9	63.4° 15.6°	14.3	59.3° 14.8°	14.9

\* Beam Width represented for functional purposes only. See pattern diagram for beam shape\*

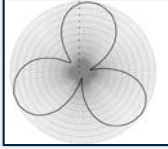
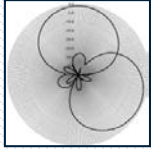
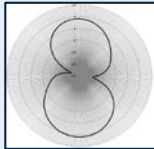
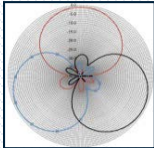
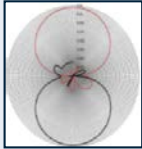
## MECHANICAL SPECIFICATIONS (based on Antenna configuration)

ANTENNA MODEL	BEAM CONFIGURATION	Connector Types		Antenna Weight	
		RF Interface- 7/16 DIN	GPS interface Mini-DIN	Antenna	Antenna with GPS
CYL-QAP-2-C	Omni Clover (360°)	4	1	23.0 lbs (10.4 kg)	24.0 lbs (10.9 kg)
CYL-QAP-2-H	Omni Heart (240°)	4	1	21.5 lbs (9.6 kg)	22.5 lbs (10.2 kg)
CYL-QAP-2-P	Omni Peanut (180°)	4	1	20.5 lbs (9.3 kg)	21.5 lbs (9.8 kg)
CYL-QAP-2-T	Tri-Sector	12	1	25.0 lbs (11.4 kg)	26.0 lbs (11.8 kg)
CYL-QAP-2-B	Bi-Sector	8	1	22.0 lbs (10.0 kg)	23.0 lbs (10.5 kg)

## GPS SPECIFICATIONS

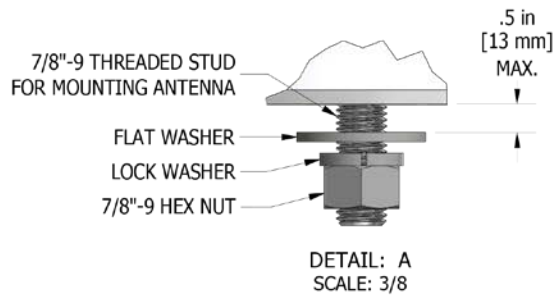
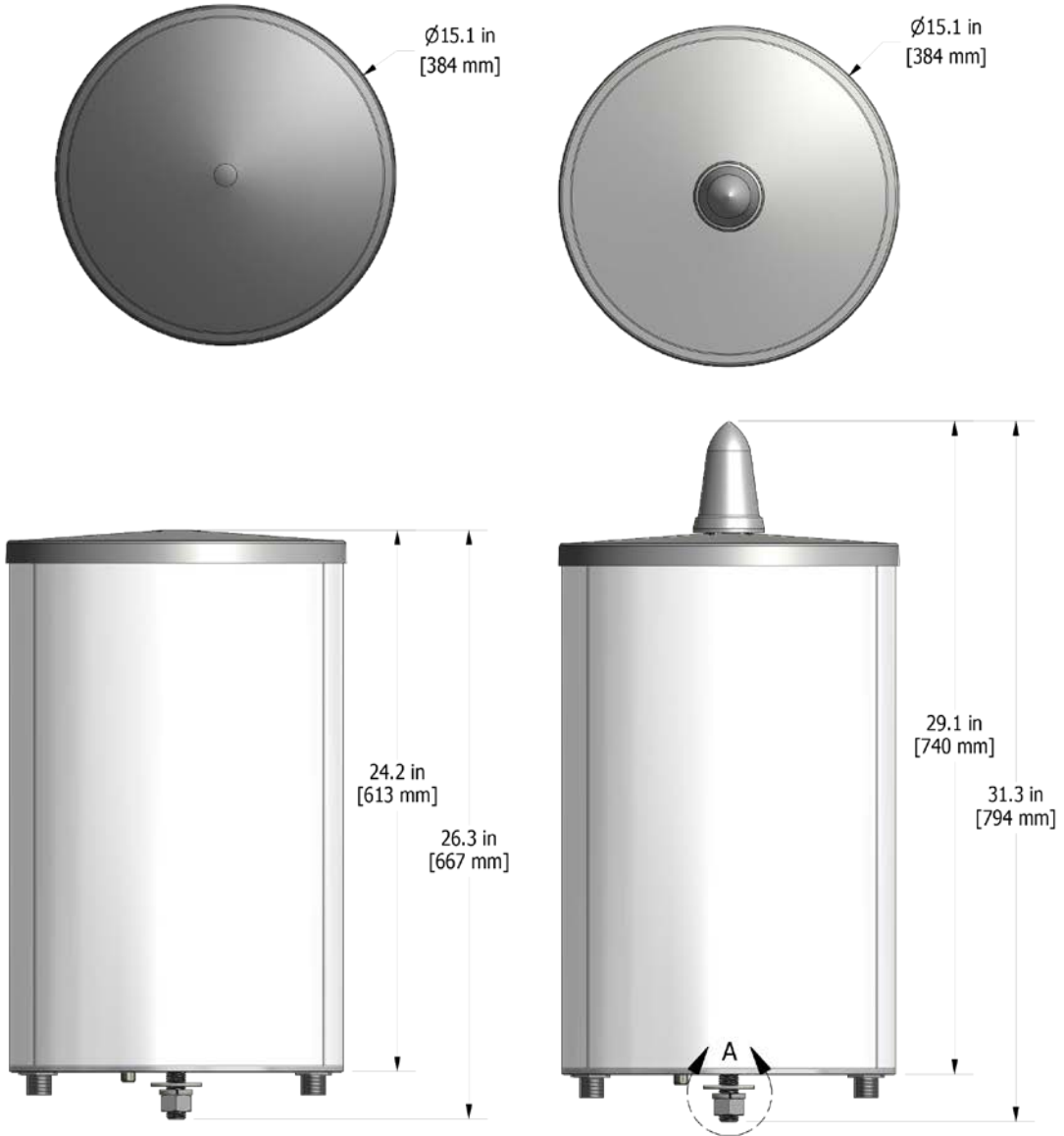
Frequency	Amplifier Gain	VSWR	Max Noise	Voltage Range	Current @ 5V	Filtering	Out of band rejection	Lightening protection
1575.42Mhz ±1.2Mhz	26.5dB ± 3dB	<2.0:1	4.5dB @ 25°C	3.3 - 12V regulated	40mA	4 stages including pre-selector	65dB @ 1559Mhz 65dB @ 1625Mhz	EN61000-4-5 Level 4

## ORDER INFORMATION

Models	Description
CYL-QAP-2-C	 <p>OMNI CLOVER</p>
CYL-QAP-2-C	Cantenna with 4 DIN connectors Clover Omni pattern
CYL-QAP-2-C-G	Cantenna with 4 DIN connectors Clover Omni pattern & GPS with 1 mini-DIN
CYL-QAP-2-H	 <p>OMNI HEART</p>
CYL-QAP-2-H	Cantenna with 4 DIN connectors Heart Omni pattern
CYL-QCAP-2-H-G	Cantenna with 4 DIN connectors Heart Omni pattern & GPS with 1 mini-DIN
CYL-QAP-2-P	 <p>OMNI PEANUT</p>
CYL-QAP-2-P	Cantenna with 4 DIN connectors Peanut Omni pattern
CYL-QAP-2-P-G	Cantenna with 4 DIN connectors Peanut Omni pattern & GPS with 1 mini-DIN
CYL-QAP-2-T	 <p>THREE SECTORS</p>
CYL-QAP-2-T	Cantenna with 12 DIN connectors (3) 65° sectors
CYL-QAP-2-T-G	Cantenna with 12 DIN connectors (3) 65° sectors & GPS with 1 mini-DIN
CYL-QAP-2-B	 <p>TWO SECTORS</p>
CYL-QAP-2-B	Cantenna with 8 DIN connectors (2) 65° sector
CYL-QAP-2-B-G	Cantenna with 8 DIN connectors (2) 65° sectors & GPS with 1 mini-DIN

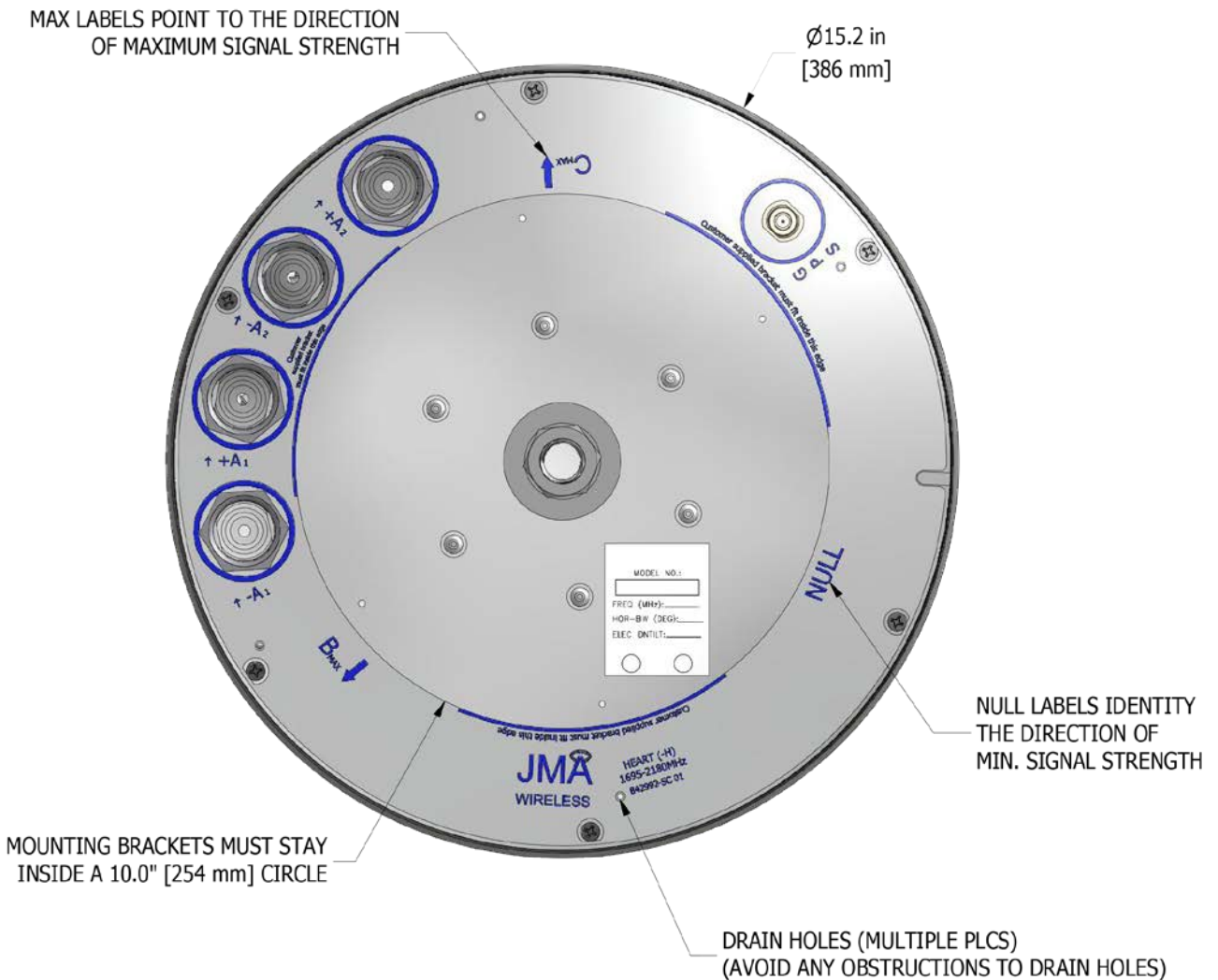
Please refer to Fixed tilt antenna matrix for Small cell Site Solutions and mounting bracket ordering information

### Mechanical Outline Drawing



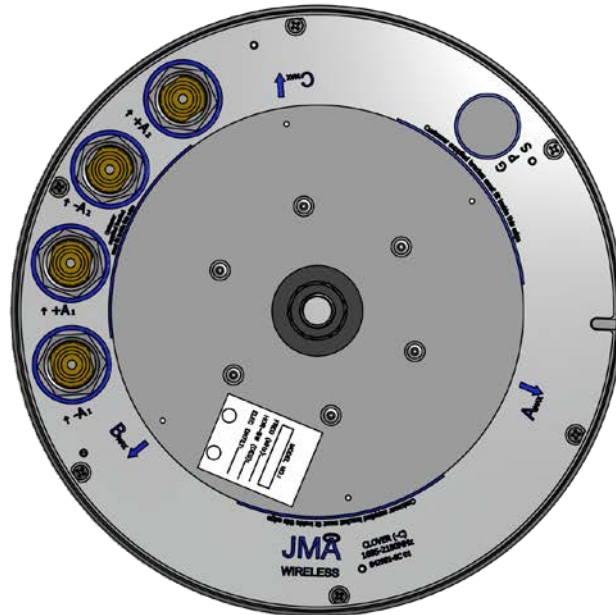
### Mechanical Outline Drawing

\* SHOWN BELOW IS THE BOTTOM VIEW OF THE OMNI CLOVER OPTION. CONNECTOR LOCATION & COUNT MAY VARY DEPENDING ON ANTENNA OPTION. REFER TO PAGE 2 FOR MORE DETAILS.



**Mechanical Outline Drawing**

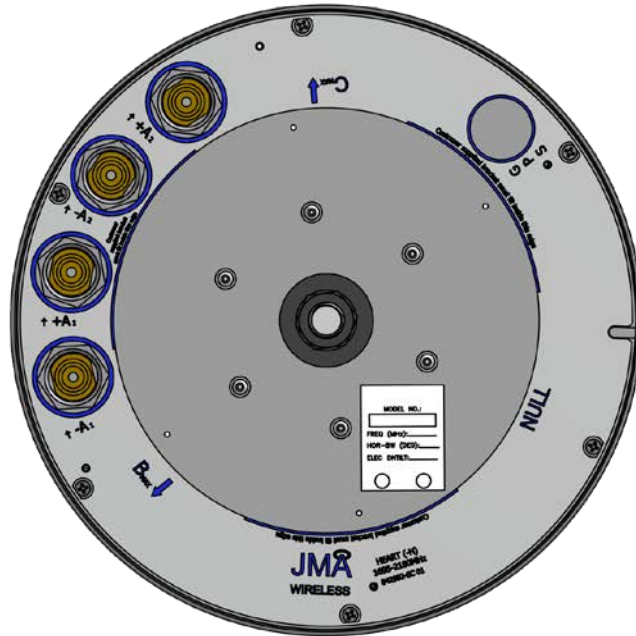
CYL-QAP-2-C  
(CLOVER)



CYL-QAP-2-C-G  
(CLOVER)



**Mechanical Outline Drawing**  
**CYL-QAP-2-H**  
**(HEART)**

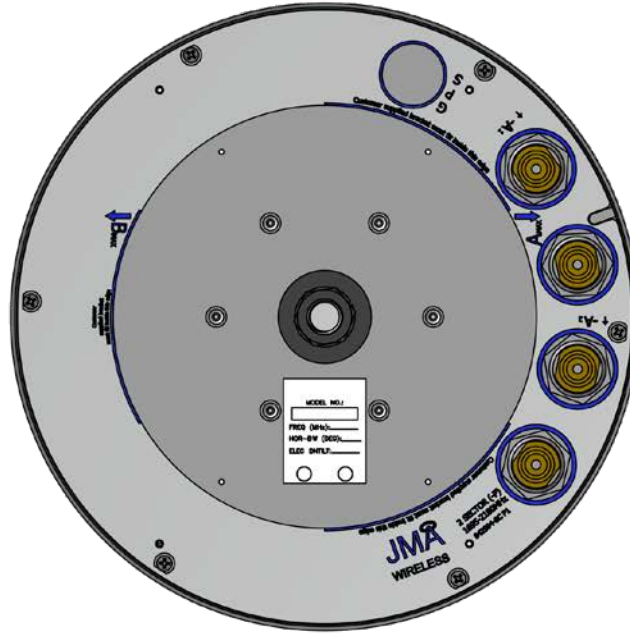


**CYL-QAP-2-H-G**  
**(HEART)**

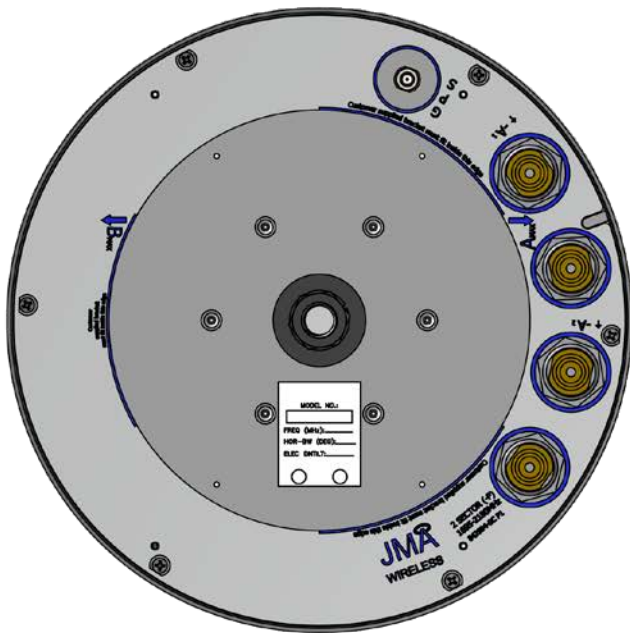


**Mechanical Outline Drawing**

**CYL-QAP-2-P  
(PEANUT)**



**CYL-QAP-2-P-G  
(PEANUT)**



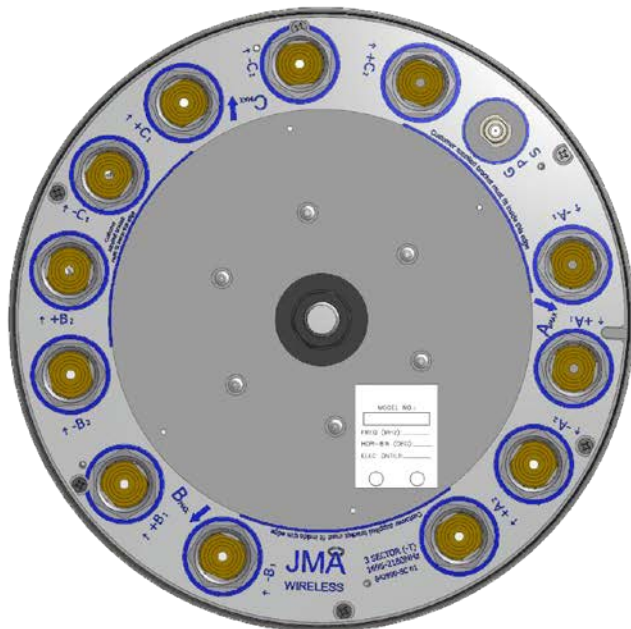


**Mechanical Outline Drawing**

**CYL-QAP-2-T  
(3 SECTOR)**

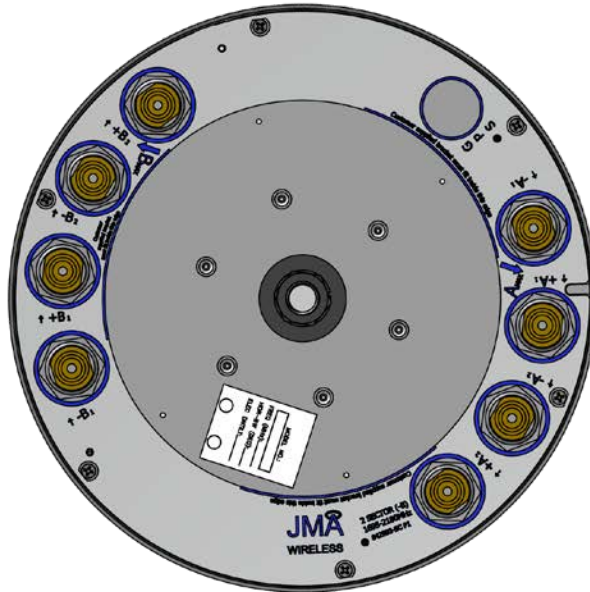


**CYL-QAP-2-T-G  
(3 SECTOR)**



**Mechanical Outline Drawing**

**CYL-QAP-2-B  
(2 SECTOR)**



**CYL-QAP-2-B-G  
(2 SECTOR)**

