

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*							

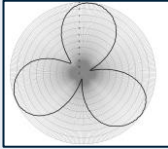
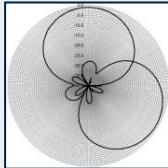
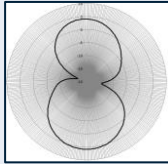
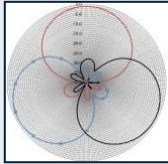
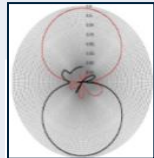
MECHANICAL SPECIFICATIONS (based on Antenna configuration)

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

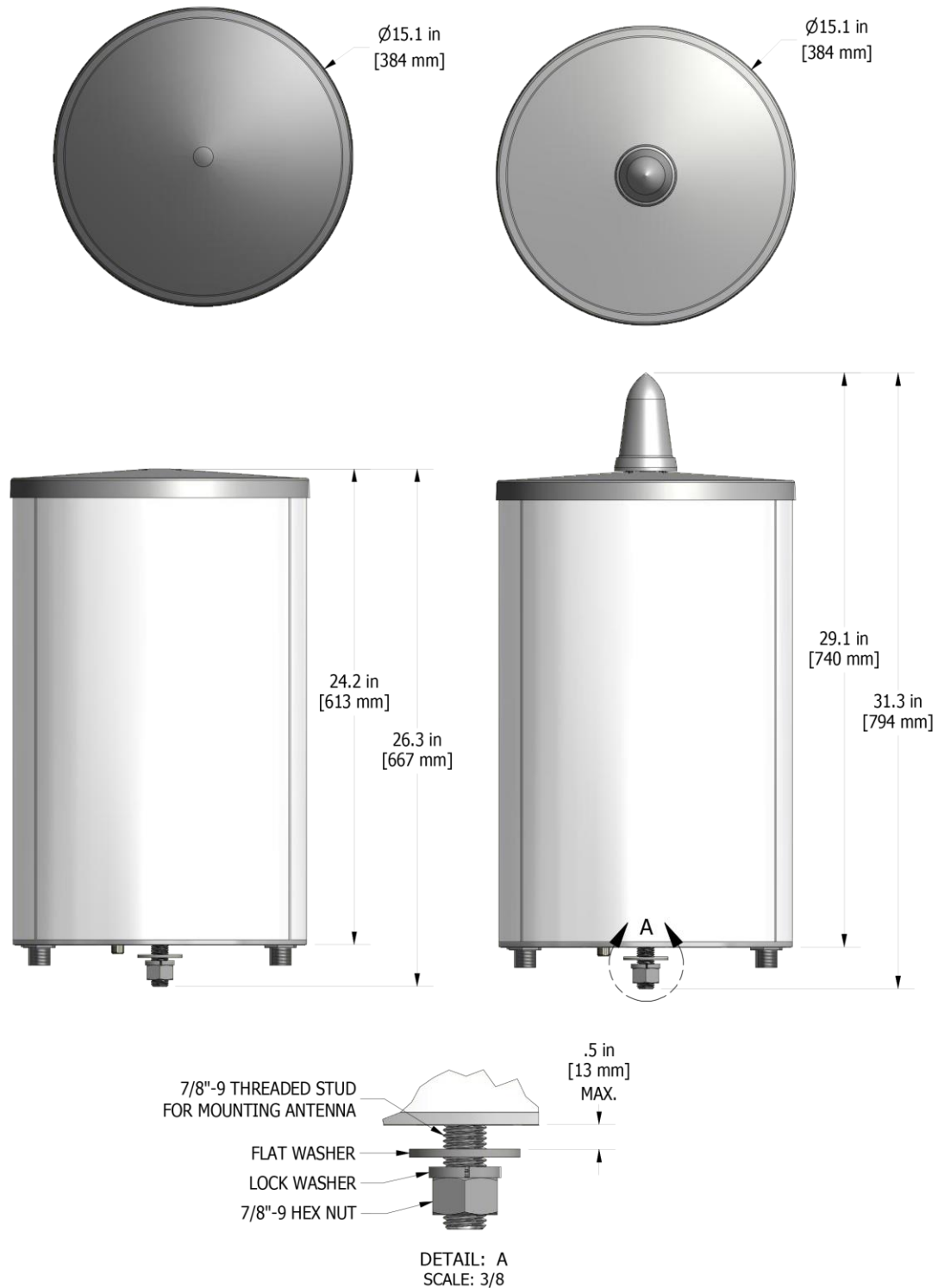
Frequency	Amplifier Gain	VSWR	Max Noise	Voltage Range	Current @ 5V	Filtering	Out of band rejection	Lightening protection
1575.42Mhz ±1.2Mhz	26.5dB ± 3dB	<2.0:1	4.5dB @ 25°C	3.3 - 12V regulated	40mA	4 stages including pre-selector	65dB @ 1559Mhz 65dB @ 1625Mhz	EN61000-4-5 Level 4

ORDER INFORMATION

Models	Description	
CYL-QAP-2-C		OMNI CLOVER
CYL-QAP-2-C	Antenna with 4 DIN connectors Clover Omni pattern	
CYL-QAP-2-H		OMNI HEART
CYL-QAP-2-H	Antenna with 4 DIN connectors Heart Omni pattern	
CYL-QAP-2-P		OMNI PEANUT
CYL-QAP-2-P	Antenna with 4 DIN connectors Peanut Omni pattern	
CYL-QAP-2-T		THREE SECTORS
CYL-QAP-2-T	Antenna with 12 DIN connectors (3) 65° sectors	
CYL-QAP-2-B		TWO SECTORS
CYL-QAP-2-B	Antenna with 8 DIN connectors (2) 65° sector	

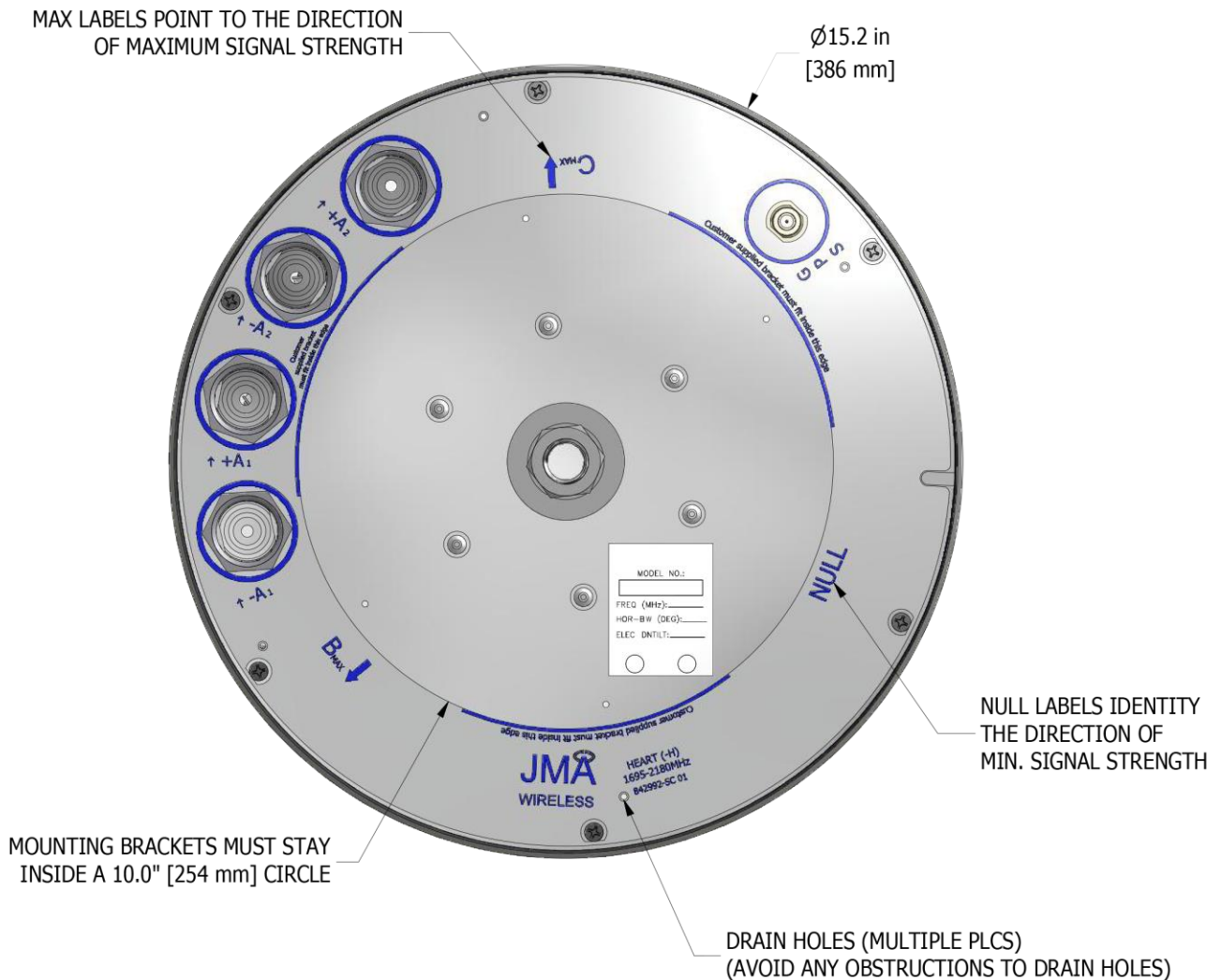
Please refer to Fixed tilt antenna matrix for Small cell Site Solutions and mounting bracket ordering information

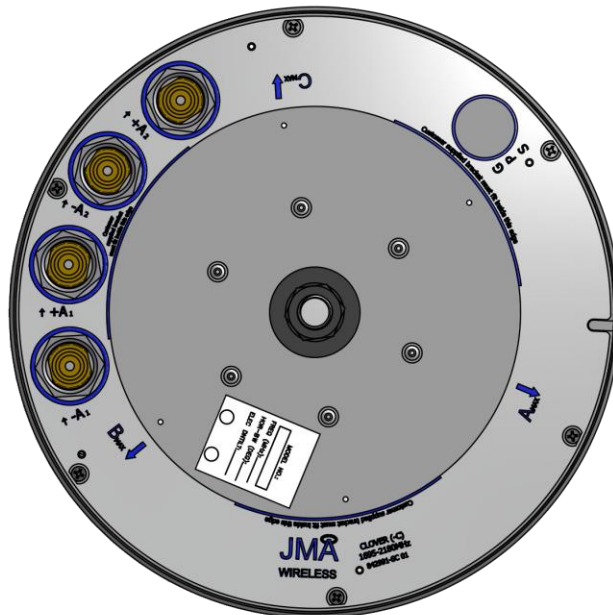
Mechanical Outline Drawing



Mechanical Outline Drawing

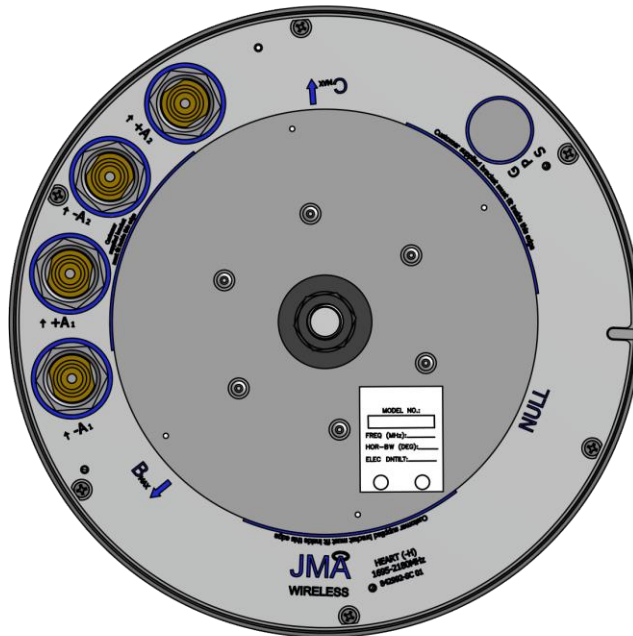
* SHOWN BELOW IS THE BOTTOM VIEW OF THE OMNI CLOVER OPTION. CONNECTOR LOCATION & COUNT MAY VARY DEPENDING ON ANTENNA OPTION. REFER TO PAGE 2 FOR MORE DETAILS.



Mechanical Outline Drawing**CYL-QAP-2-C
(CLOVER)****CYL-QAP-2-C-G
(CLOVER)**

Mechanical Outline Drawing

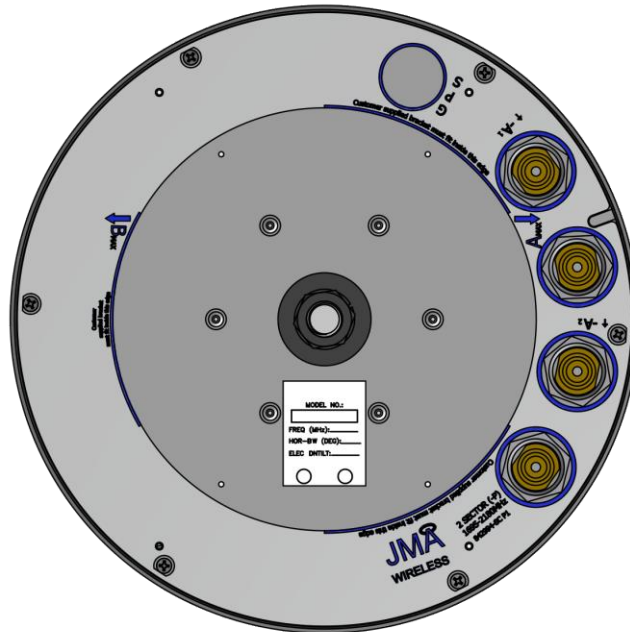
CYL-QAP-2-H (HEART)



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



CYL-QAP-2-P
(PEANUT)



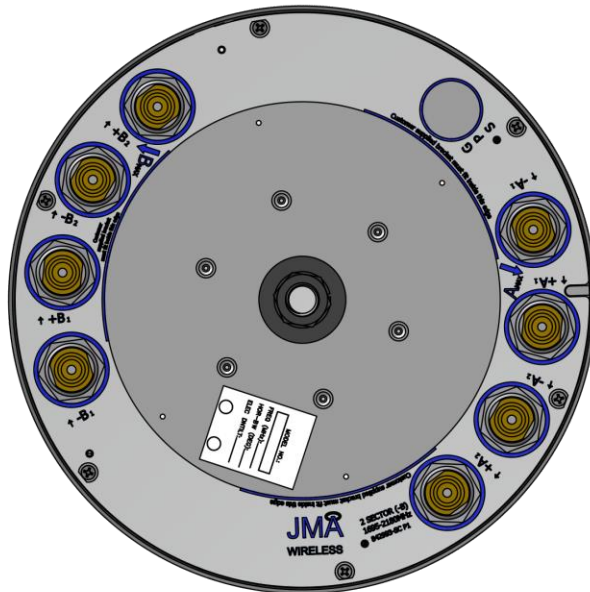
Mechanical Outline Drawing

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)**