

# CYL-X7CAP-1

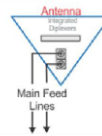
Small Cell Antenna, 698-896/1710-2170MHz, 1FT

- X-Pol Small Cell
- Internally Diplexed
- Suitable for Pole or Building mount
- Broadband Radiators
- Internal Beam combining
- Integrated Global Position System (GPS) option



### Integrated Diplexers

Requires half the number of feeder cables



## ELECTRICAL SPECIFICATIONS

Frequency Band, MHz	698-896	1710-2170
Polarization	+/-45°	+/-45°
Electrical Down Tilt	0°	0°
VSWR/Return Loss, dB, Maximum (Diplexed)	1.5:1/14	1.5:1/12.8
Isolation Between Ports, dB, Minimum	24	28
Intermodulation (2x20w), IM3, dBc, Maximum	-153	-153
Impedance, ohms	50	50
Maximum Power Per Connector, CW (w)	250	125

## MECHANICAL SPECIFICATIONS

Dimensions, Height/Diameter	13.6/15.1 in (345/384 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	25.8 lbf (114.7N) @100mph
Equivalent Flat Plate	0.51 sq-ft (c=2) @ 100mph

## ELECTRICAL SPECIFICATIONS (based on Antenna configuration)

Antenna Model	No. of beams	698-824		824-896		1710-1880		1850-1990		1920-2170	
		H-Beam V-Beam	Gain (dBi)	H-Beam V-Beam	Gain (dBi)	H-Beam V-Beam	Gain (dBi)	H-Beam V-Beam	Gain (dBi)	H-Beam V-Beam	Gain (dBi)
CYL-X7CAP-1-C	1	*360° 70°	3.6	*360° 65°	4.6	*360° 32°	7.1	*360° 30°	7.2	*360° 28°	7.3
CYL-X7CAP-1-H	1	*240° 70°	5.0	*240° 65°	5.2	*240° 32°	7.5	*240° 30°	8.7	*240° 28°	9.3
CYL-X7CAP-1-P	1	*180° 70°	5.0	*180° 65°	5.3	*180° 32°	8.6	*180° 30°	8.7	*180° 28°	8.8
CYL-X7CAP-1-T	3	70° 70°	7.8	65° 65°	8.0	62° 32°	11.2	60° 30°	11.7	59° 28°	12.1
CYL-X7CAP-1-B	2	70° 70°	7.8	65° 65°	8.0	62° 32°	11.2	60° 30°	11.7	59° 28°	12.1

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

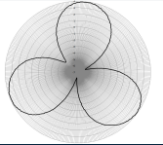
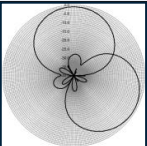
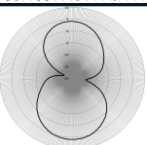
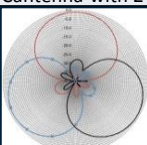
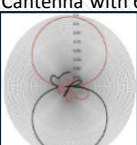
## MECHANICAL SPECIFICATIONS (based on Antenna configuration)

ANTENNA MODEL	BEAM CONFIGURATION	Connector Types		ANTENNA WEIGHT	
		7/16 DIN	Mini-DIN (GPS)	ANTENNA	Antenna w GPS Option
CYL-X7CAP-1-C	Omni Clover	2	1	16.0 lbs (7.3 kg)	17.0 lbs (7.7 kg)
CYL-X7CAP-1-H	Omni Heart	2	1	15.1 lbs (6.8 kg)	16.1 lbs (7.3 kg)
CYL-X7CAP-1-P	Omni Peanut	2	1	14.7 lbs (6.7 kg)	15.7 lbs (7.1 kg)
CYL-X7CAP-1-T	Tri-Sector	6	1	17.3 lbs (7.8 kg)	18.3 lbs (8.3 kg)
CYL-X7CAP-1-B	Bi-Sector	4	1	15.7 lbs (7.1 kg)	16.7 lbs (7.8 kg)

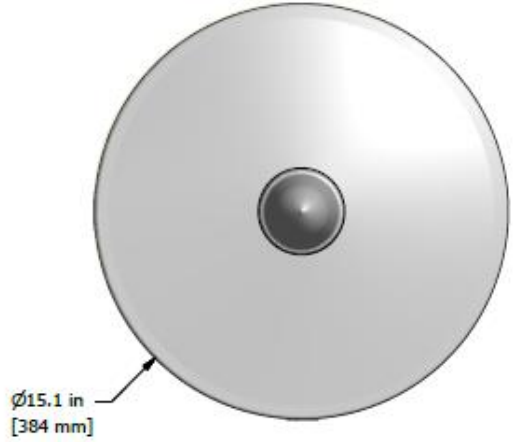
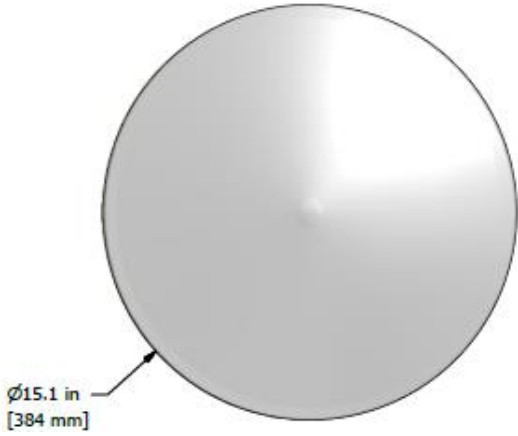
## GPS SPECIFICATIONS

Frequency	Amplifier Gain	VSWR	Max Noise	Voltage Range	Current @ 5V	Filtering	Out of band rejection	Lightning 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

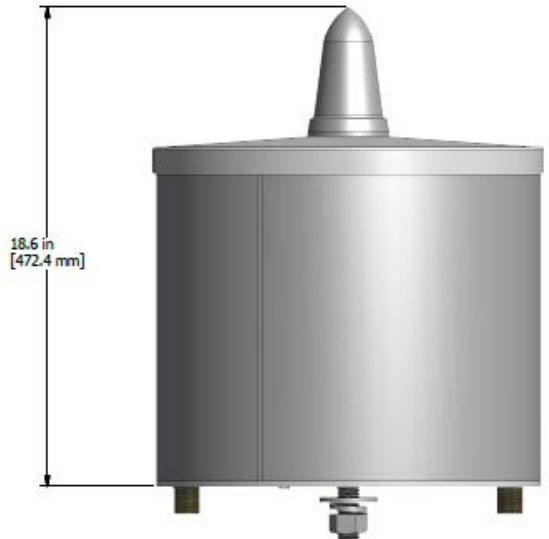
## ORDER INFORMATION

Models	Description
<b>CYL-X7CAP-1-C</b>	 <b>OMNI CLOVER</b>
CYL-X7CAP-1-C	Cantenna with 2 DIN connectors Clover Omni pattern with integrated Diplexer
CYL-X7CAP-1-C-G	Cantenna with 2 DIN connectors Clover Omni pattern w integrated Diplexer & GPS with 1 mini-DIN
<b>CYL-X7CAP-1-H</b>	 <b>OMNI HEART</b>
CYL-X7CAP-1-H	Cantenna with 2 DIN connectors Heart Omni pattern with integrated Diplexer
CYL-X7CAP-1-H-G	Cantenna with 2 DIN connectors Heart Omni pattern w integrated Diplexer & GPS with 1 mini-DIN
<b>CYL-X7CAP-1-P</b>	 <b>OMNI PEANUT</b>
CYL-X7CAP-1-P	Cantenna with 2 DIN connectors Peanut Omni pattern with integrated Diplexer
CYL-X7CAP1-P-G	Cantenna with 2 DIN connectors Peanut Omni pattern w integrated Diplexer & GPS with 1 mini-DIN
<b>CYL-X7CAP-1-T</b>	 <b>THREE SECTORS</b>
CYL-X7CAP-1-T	Cantenna with 6 DIN connectors (3) 65° sectors with integrated Diplexer
CYL-X7CAP-1-T-G	Cantenna with 6 DIN connectors (3) 65° sectors with integrated Diplexer & GPS with 1 mini-DIN
<b>CYL-X7CAP-1-B</b>	 <b>TWO SECTORS</b>
CYL-X7CAP-1-B	Cantenna with 4 DIN connectors (2) 65° sectors with integrated Diplexer
CYL-X7CAP-1-B-G	Cantenna with 4 DIN connectors (2) 65° sectors with integrated Diplexer & GPS with 1 mini-DIN

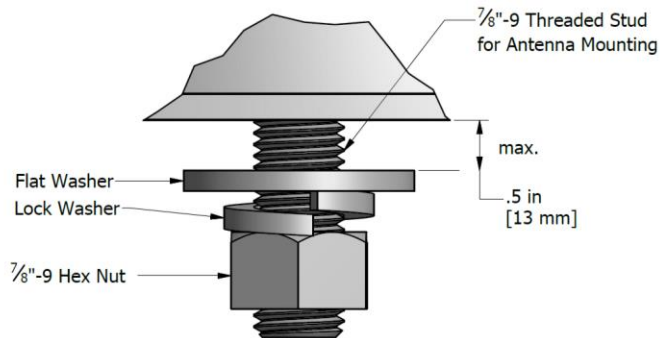
### Mechanical Outline Drawing



Antenna without GPS

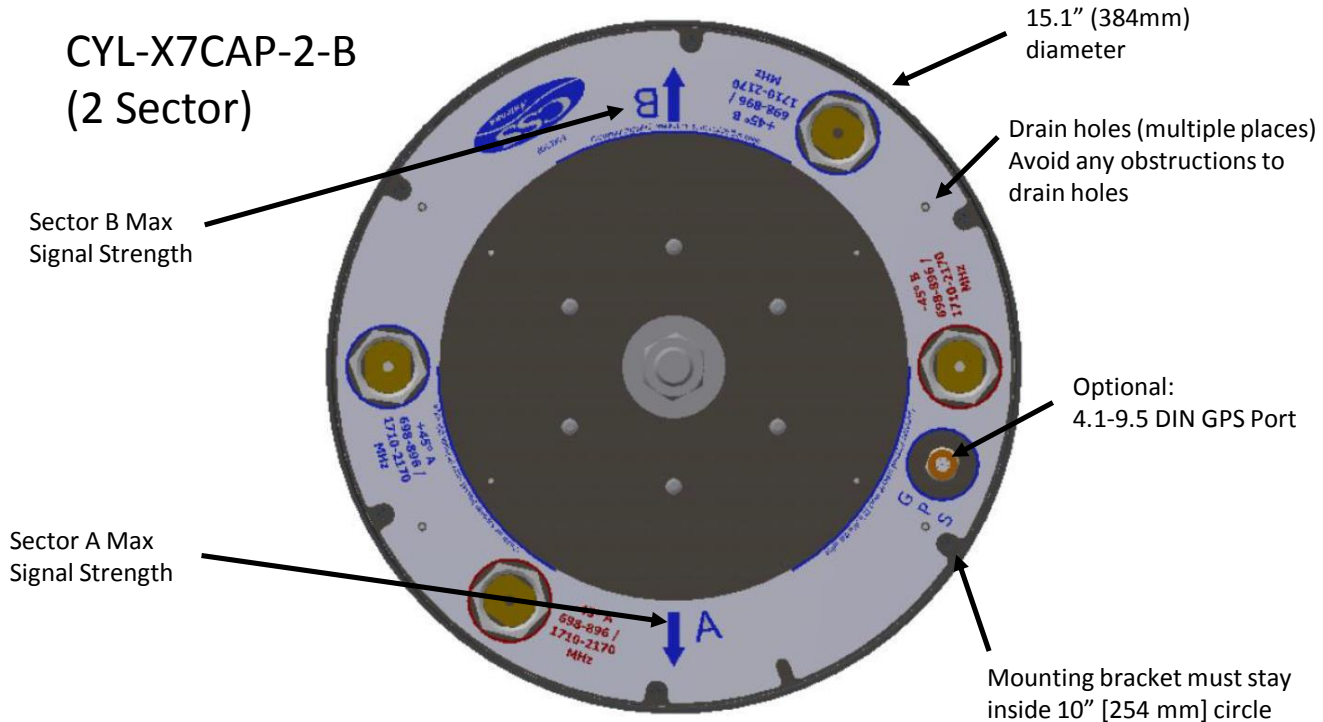


Antenna with GPS

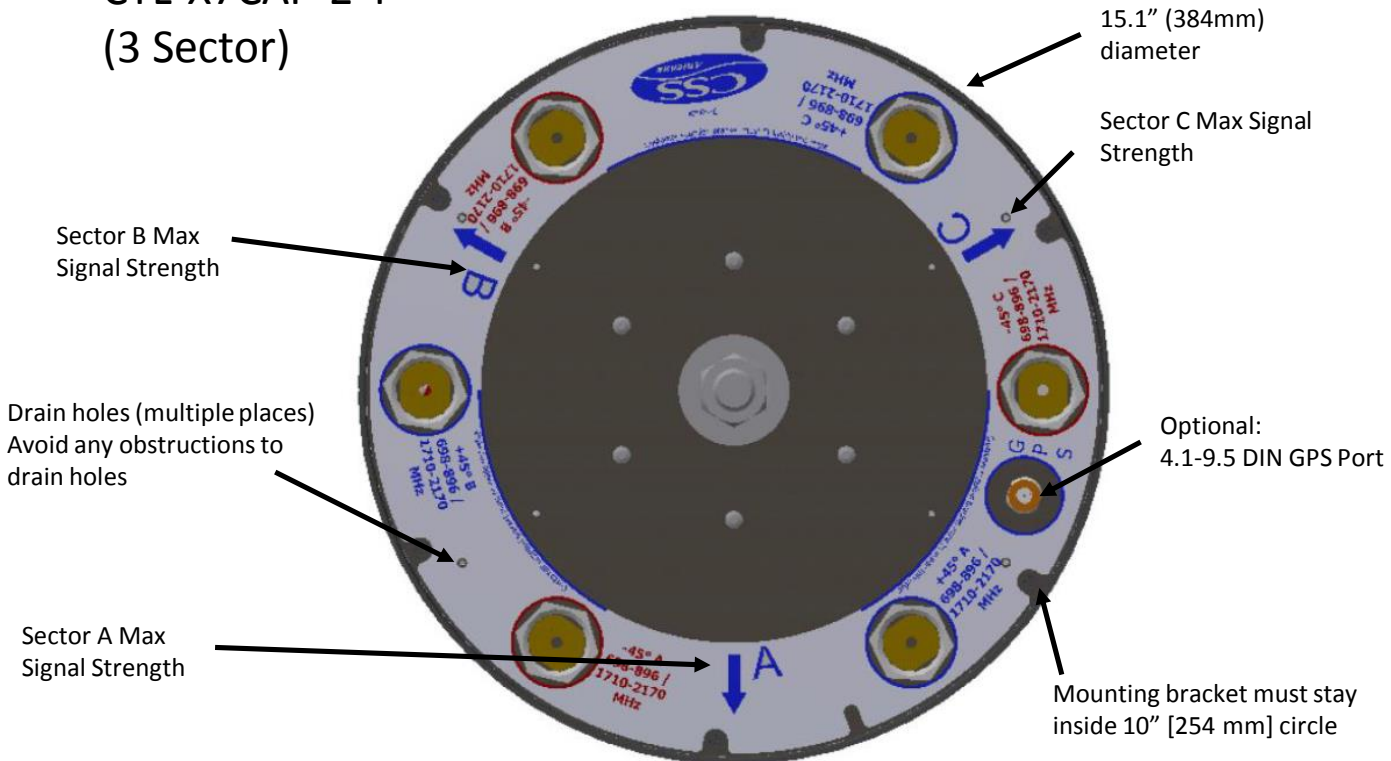


**Mechanical Outline Drawing**

**CYL-X7CAP-2-B  
(2 Sector)**

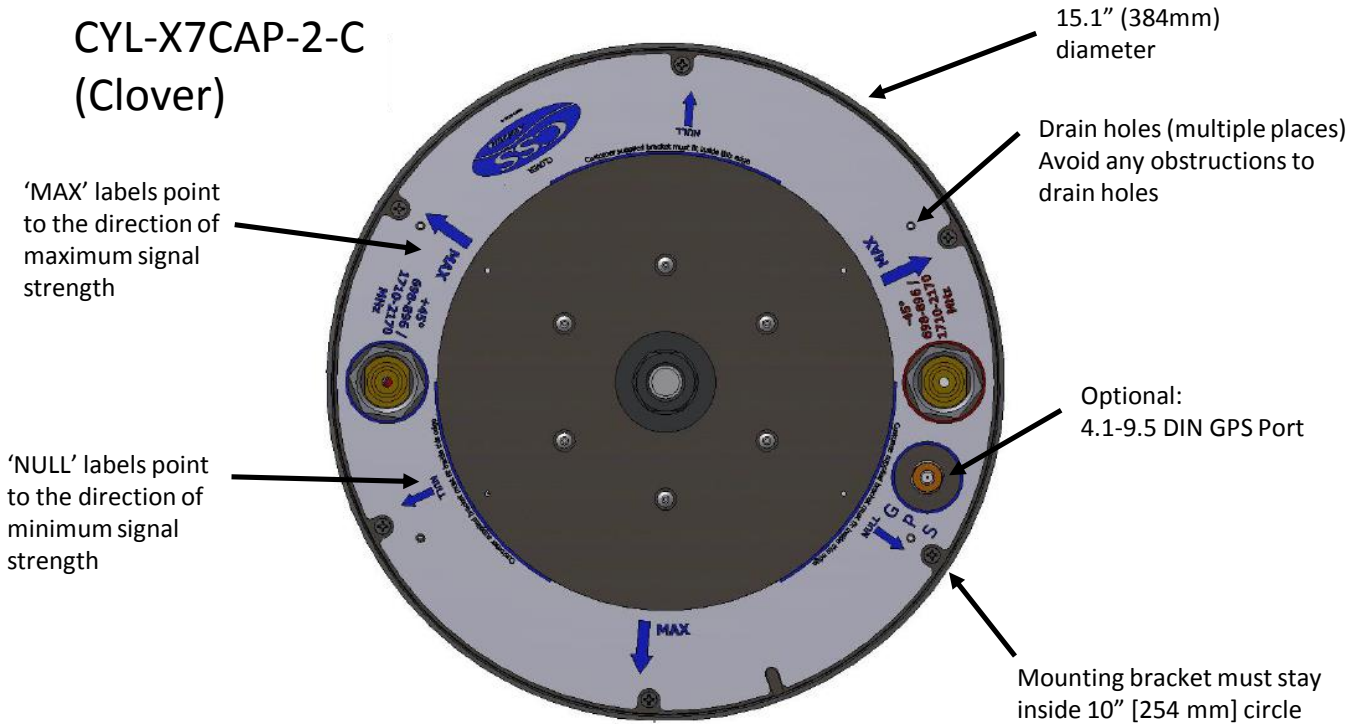


**CYL-X7CAP-2-T  
(3 Sector)**

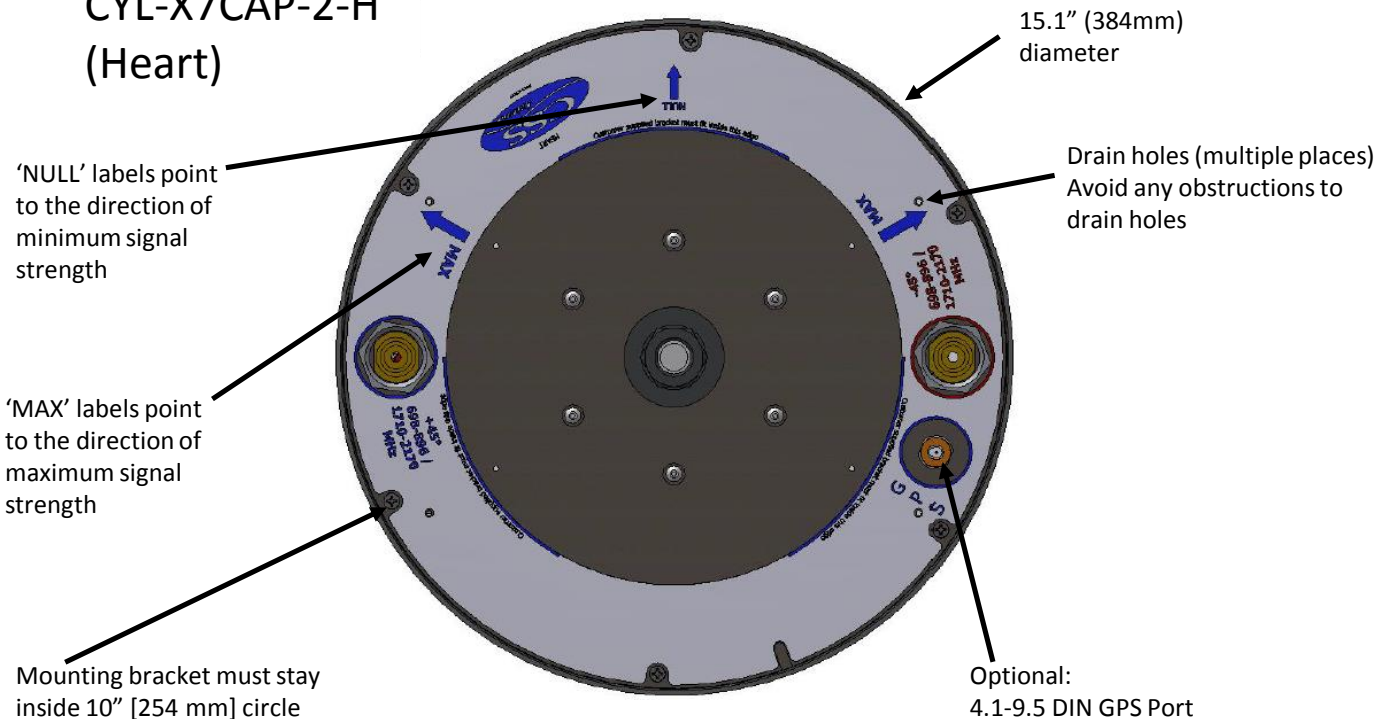


**Mechanical Outline Drawing**

**CYL-X7CAP-2-C  
(Clover)**



**CYL-X7CAP-2-H  
(Heart)**



### Mechanical Outline Drawing

CYL-X7CAP-2-P  
(Peanut)

