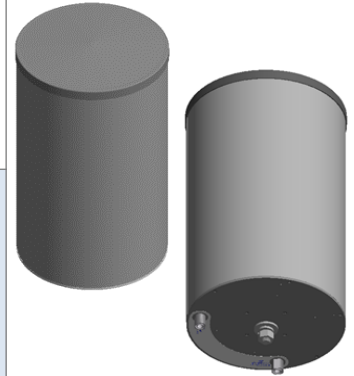


# CYL-X7CAP-2

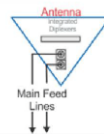
Small Cell Antenna, 698-896/1695-2180MHz, 2FT

- X-Pol Small Cell
- Internally Diplexed option
- Suitable for Pole or Building mount
- Broadband Radiators (AWS-3)
- 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	1695-2180
Polarization	+/-45°	+/-45°
Electrical Down Tilt	0°	0°
VSWR/Return Loss, dB, Maximum (Non-Diplexed)	1.5:1/14.0	1.5:1/14.0
VSWR/Return Loss, dB, Maximum (Diplexed)	1.5:1/14.0	1.5:1/14.0
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	24.2/15.1 in (615/384 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	698-824		824-896		1695-1880		1850-1990		1920-2180	
		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-2-C	1	*360° 33°	6.4	*360° 32°	6.8	*360° 17°	8.6	*360° 16°	8.8	*360° 15°	9.0
CYL-X7CAP-2-H	1	*240° 33°	7.3	*240° 32°	7.9	*240° 17°	10.8	*240° 16°	10.9	*240° 15°	11.3
CYL-X7CAP-2-P	1	*180° 33°	7.5	*180° 32°	8.0	*180° 17°	10.8	*180° 16°	10.9	*180° 15°	11.3
CYL-X7CAP-2-T	3	69° 33°	10.1	63° 32°	10.5	68° 17°	13.1	64° 16°	13.5	62° 15°	13.9
CYL-X7CAP-2-B	2	69° 33°	10.1	63° 32°	10.5	68° 17°	13.1	64° 16°	13.5	62° 15°	13.9

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

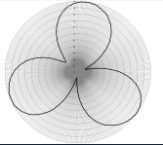
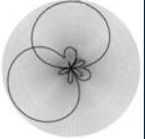
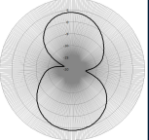
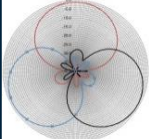
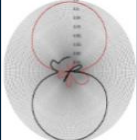
## MECHANICAL SPECIFICATIONS (based on antenna configuration)

ANTENNA MODEL	BEAM CONFIGURATION	Connector Types		ANTENNA WEIGHT	
		7/16 DIN	Mini-DIN (GPS)	ANTENNA	Antenna w GPS Option
CYL-X7CAP-2-C	Omni Clover	2	1	23.0 lbs (10.4 kg)	24.0 lbs (10.9 kg)
CYL-X7CAP-2-H	Omni Heart	2	1	21.5 lbs (9.6 kg)	22.5 lbs (10.2 kg)
CYL-X7CAP-2-P	Omni Peanut	2	1	20.5 lbs (9.3 kg)	21.5 lbs (9.8 kg)
CYL-X7CAP-2-T	Tri-Sector	6	1	24.7 lbs (11.2 kg)	25.7 lbs (11.7 kg)
CYL-X7CAP-2-B	Bi-Sector	4	1	22.3 lbs (10.1 kg)	23.3 lbs (10.6 kg)

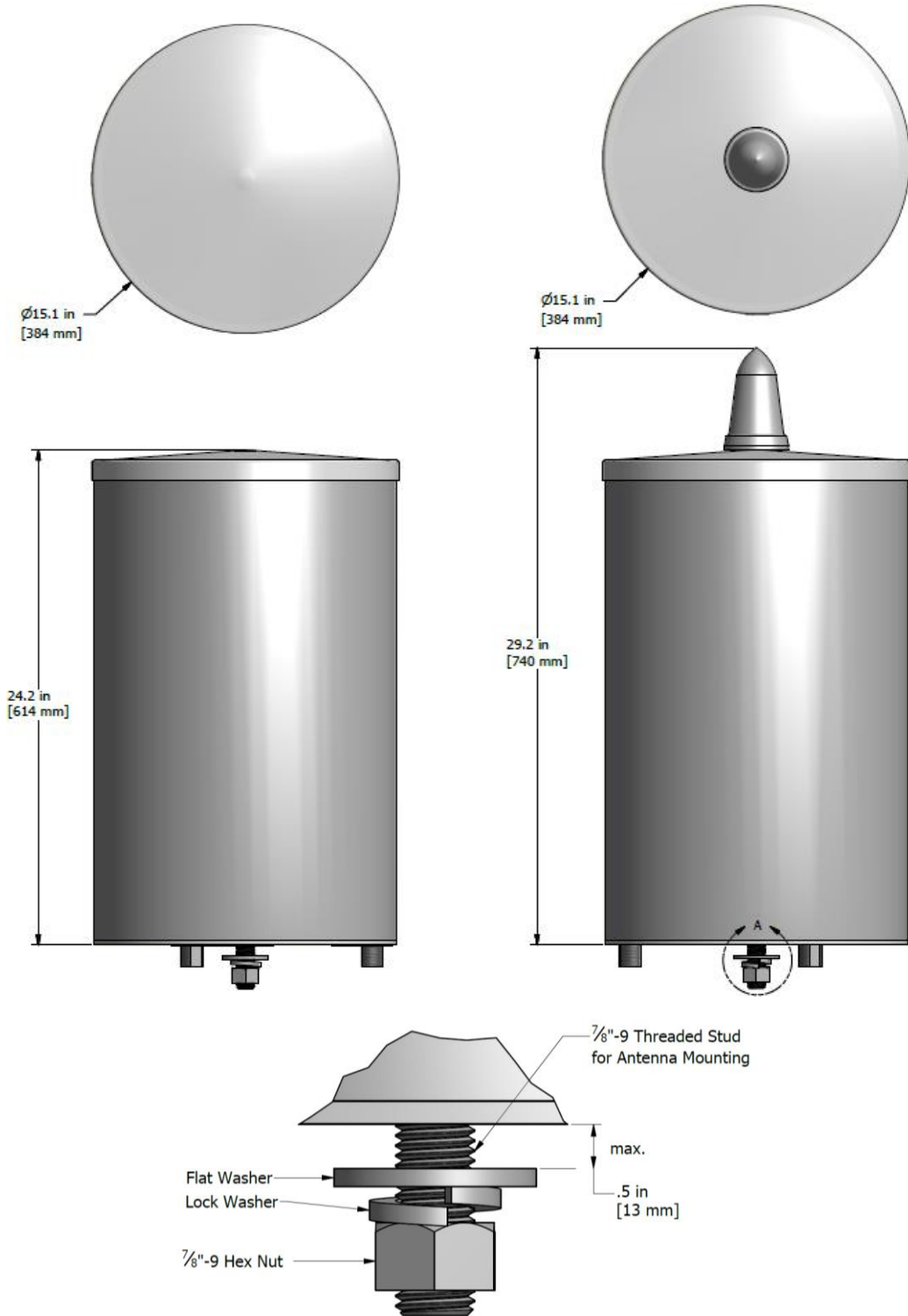
## GPS SPECIFICATIONS

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

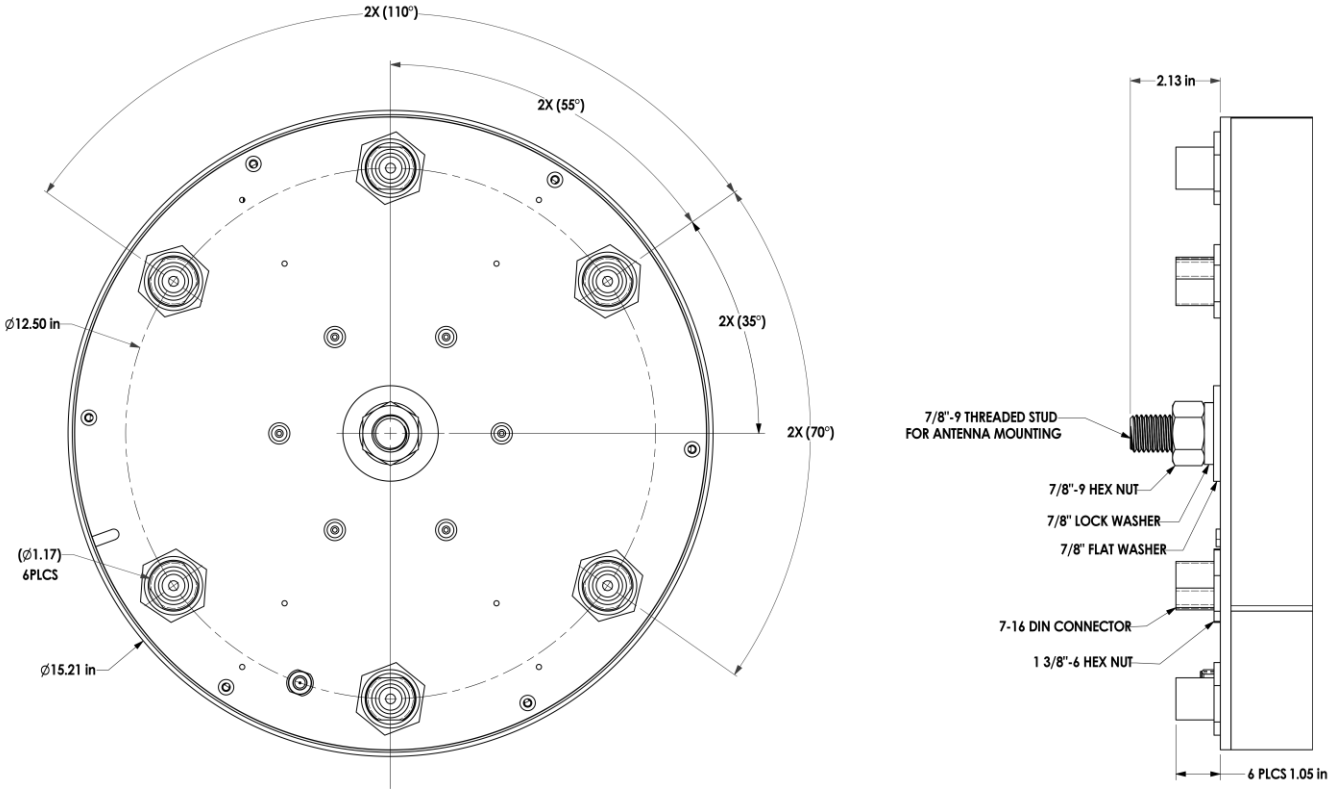
## ORDER INFORMATION

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

Mechanical Outline Drawing



### Mechanical Outline Drawing



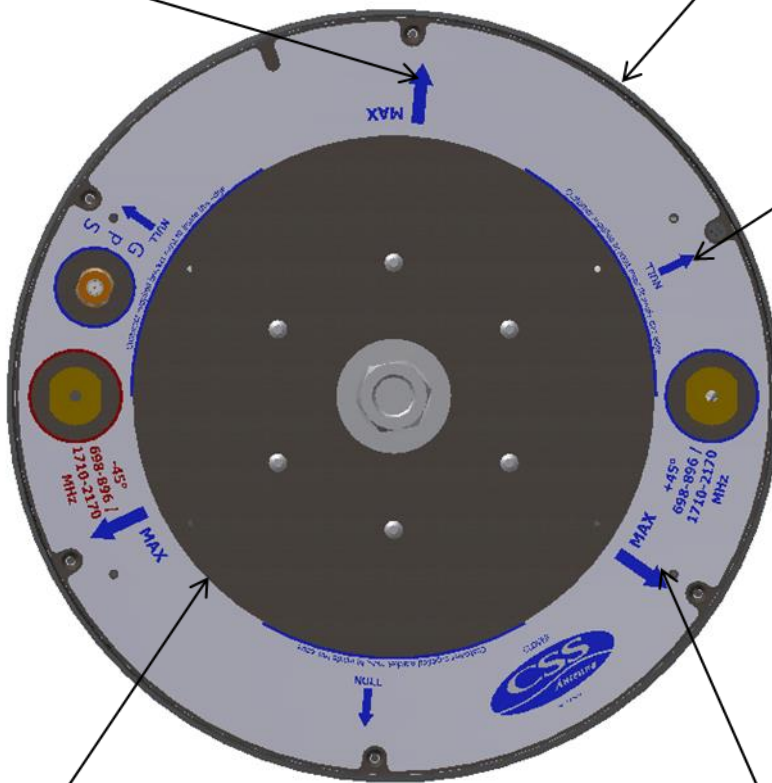
## Mechanical Outline Drawing

\*Shown below is the bottom view of the Omni Clover option. Connector location and count may vary depending on antenna option. Refer to page 2 for more details.

Max Labels point to the direction of maximum signal strength

15.1" [384 mm] dia

Null Labels point to the direction of minimum signal strength

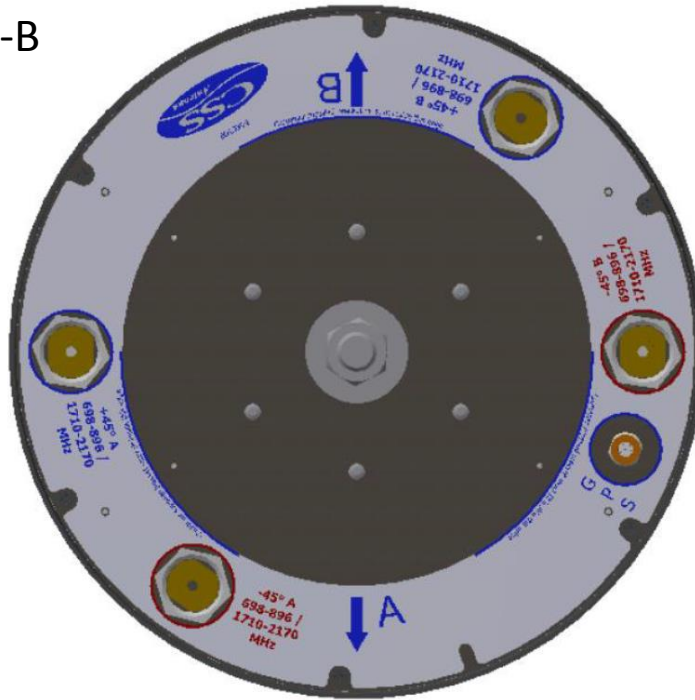


Mounting brackets must stay inside 10" [254 mm] circle

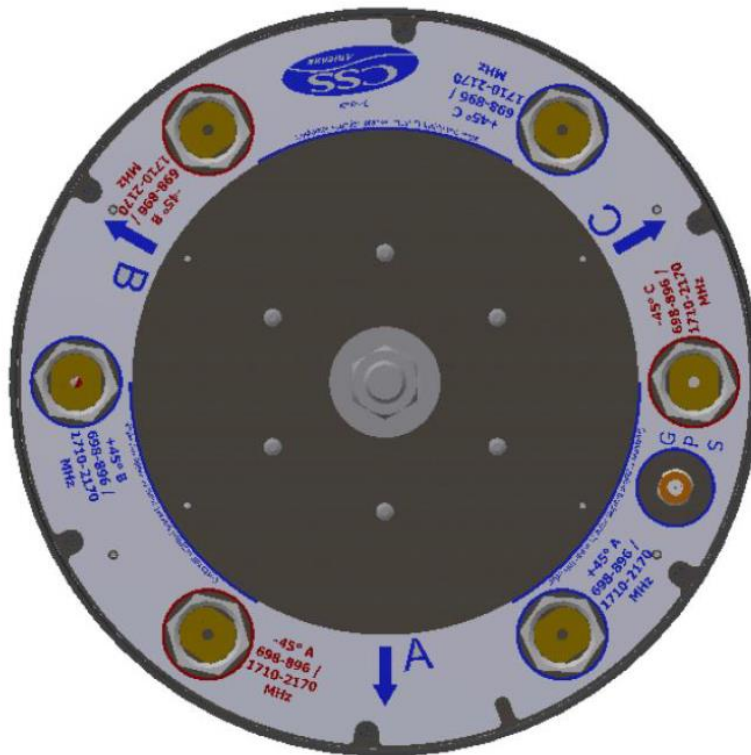
Drain Holes (multiple places)  
(Avoid any obstructions to drain holes)

Mechanical Outline Drawing

CYL-X7CAP-2-B  
(2 Sector)



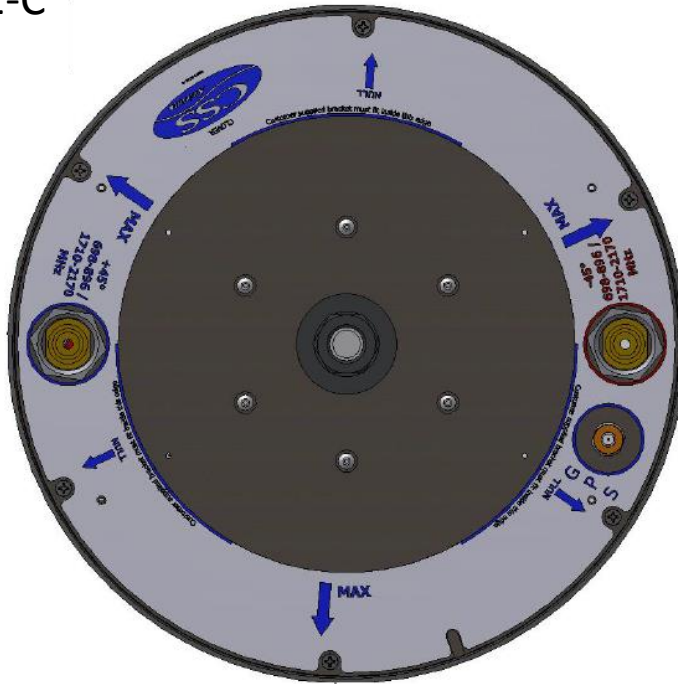
CYL-X7CAP-2-T  
(3 Sector)



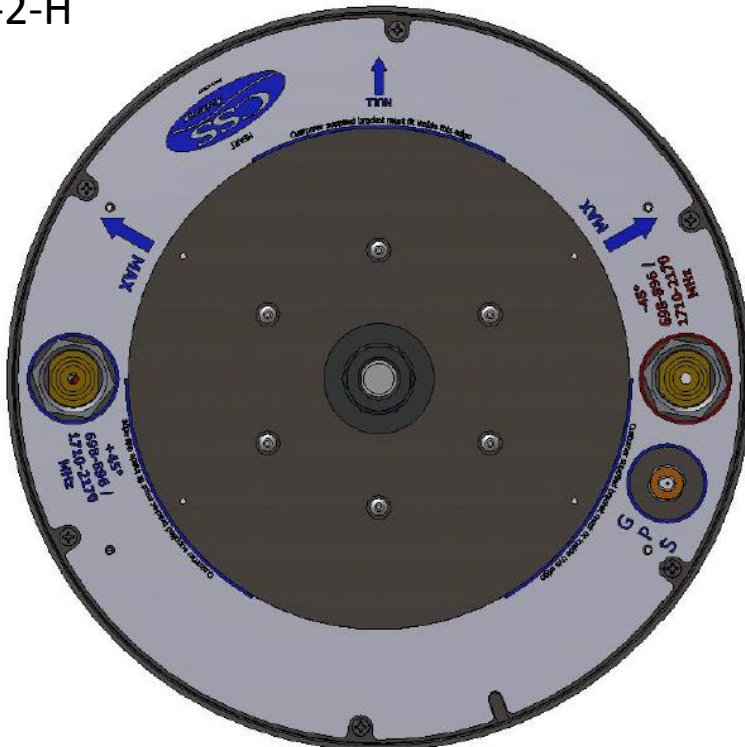


Mechanical Outline Drawing

CYL-X7CAP-2-C  
(Clover)



CYL-X7CAP-2-H  
(Heart)





### Mechanical Outline Drawing

CYL-X7CAP-2-P  
(Peanut)

