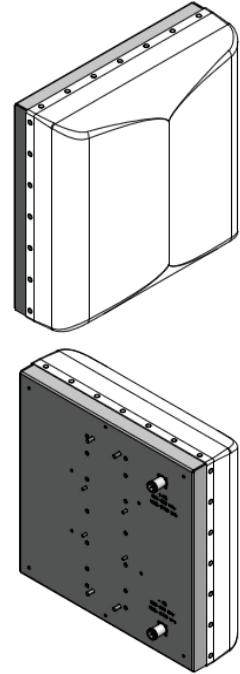


XGU-FRO-230

Antenna Systems Group

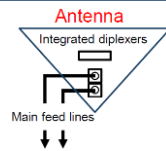
X-Pol Dual Band Antenna, 698-960/1695-2700 MHz
 30° horizontal beamwidth
 Fast Roll-Off "Spotlight"

- DAS/Outdoor DAS/Small Cell Antenna
- AWS-3 & WCS Ready
- High power design
- Suitable for LTE/CDMA/UMTS/GSM
- Included multi-position stadium bracket accommodates most mounting surfaces



Includes integrated diplexers

Reduces mainline cables
 Eliminates external tower devices



ELECTRICAL SPECIFICATIONS

Frequency band, MHz	698-745	746-896	897-960	1695-2180	2181-2360	2496-2700
Horizontal beamwidth, 3 dB points†	39°	38°	37°	33°	26°	22°
Gain, dBi	13.1	12.7	12.3	14.2	15.4	15.4
Vertical beamwidth, 3 dB points	39°	38°	37°	33°	26°	23°
Azimuth sidelobe suppression, typical, dB	>22	>22	>22	>18	>18	>18
VSWR / return loss, dB, maximum	1.5/14.0	1.5/14.0	1.5/14.0	1.5/14.0	1.5/14.0	1.5/14.0
Front-to-back ratio at 180°, dB	>30	>30	>30	>34	>34	>34
Polarization	+/-45°			+/-45°		
Electrical down tilt	0°			0°		
Isolation between ports, dB, minimum	>28			>28		
Intermodulation (2 x 20 w), IM3, dBc, max.	-153			-153		
Impedance, ohms	50			50		
Maximum power per connector, CW (w)	250 @ 850 MHz			125 @ 1900 MHz		

†Beamwidth refers to antenna in orientation shown. Upright installation will reverse H/V beamwidths.

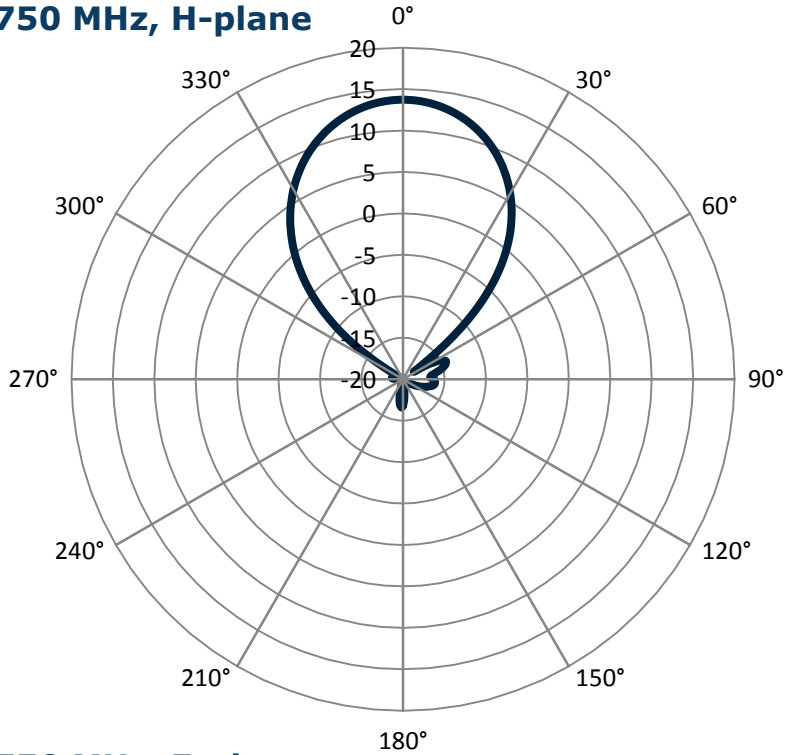
MECHANICAL SPECIFICATIONS

Dimensions, length/width/depth	24.0/24.0/8.8 in. (610/610/222 mm)
Connector (quantity) type	(2) 7-16 DIN female
Connector torque	220-265 lbf·in (23-30 N·m)
Connector location	Back
Antenna weight	18.3 lb (8.3 kg) <i>Note: Weight varies slightly based on ordering options</i>
Bracket weight	P/N 919050- 5.0 lb (2.3 kg) & P/N 919017- 13.0 lb (5.9 kg)
Standard bracket kit	P/N 919050 (included) P/N 919017 (optional)
Mechanical down tilt range	+/- 25° lateral (azimuth) & +/- 25° vertical (up/down tilts)
Radome material	High strength Luran®, UV stabilized, ASTM D1925
Wind survival	120 MPH (193 km/hr) with 919050 bracket kit and 150 MPH (241.4 km/hr) with 919017 bracket
IP protection rating	IP65 (Protection from total dust ingress and low pressure water spray from any direction)
Front wind load @ 100 mph	120.5 lbf (535.9 N)
Equivalent flat plate @ 100 mph	2.40 sq ft (c=2)

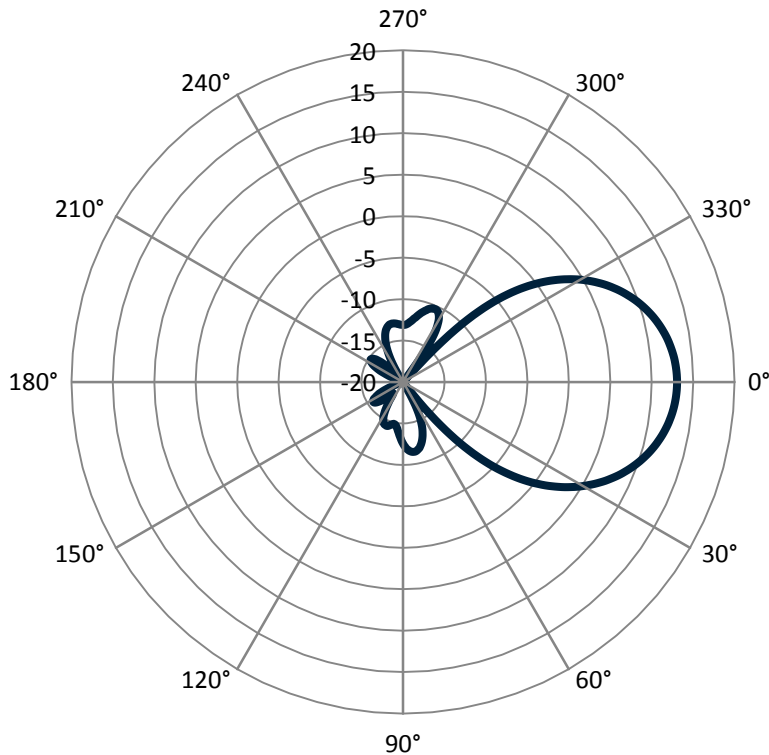
ORDER INFORMATION

MODEL	DESCRIPTION
XGU-FRO-230-I	X-pol dual band antenna with two back DIN connectors with integrated diplexers
919017	Optional bracket kit, 2-point, 22° down tilt, for 3.5" OD pole
919055	Optional inverted mounting kit, for 4.0-10.0" OD pole
91900313	Optional bracket kit for extended horizontal and vertical tilt ranges.

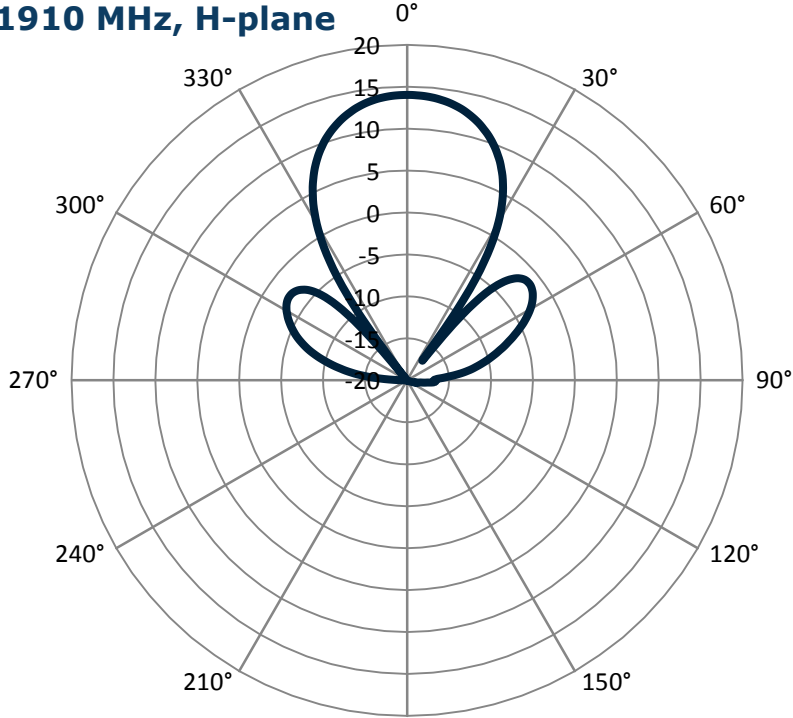
Pattern plot: 750 MHz, H-plane



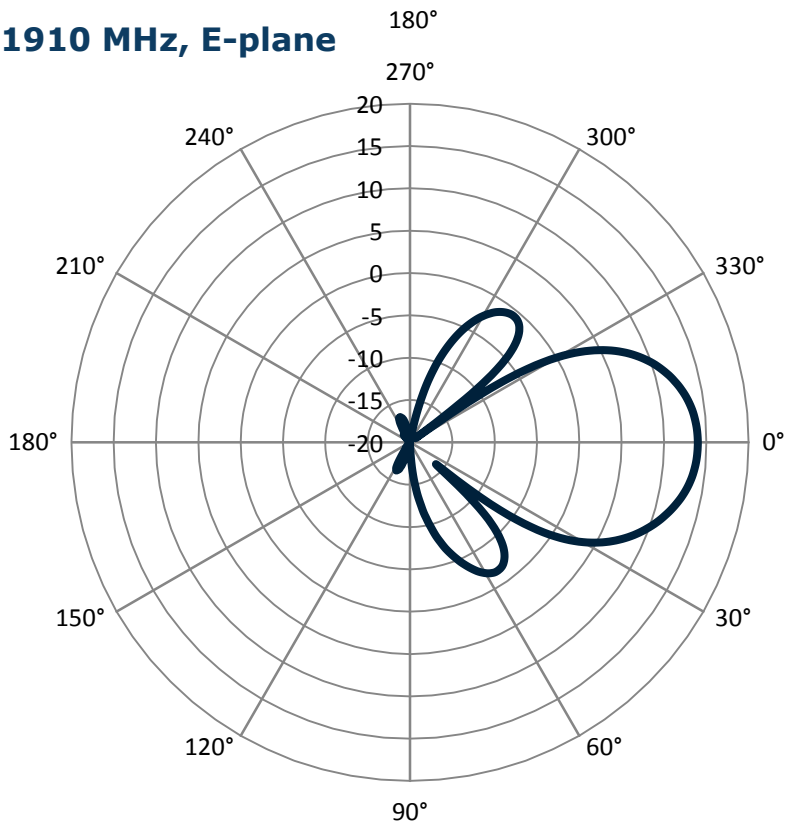
Pattern plot: 750 MHz, E-plane



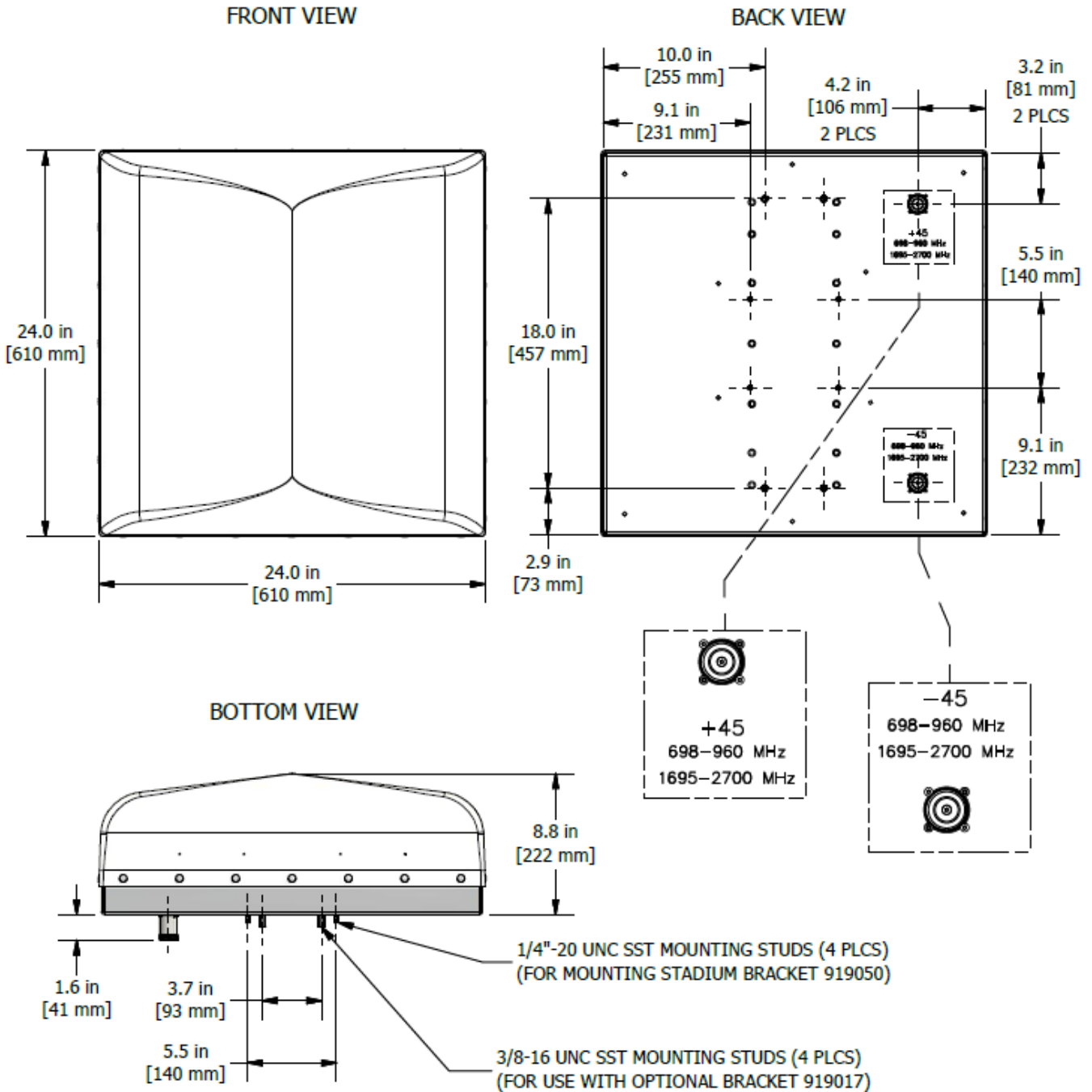
Pattern plot: 1910 MHz, H-plane



Pattern plot: 1910 MHz, E-plane

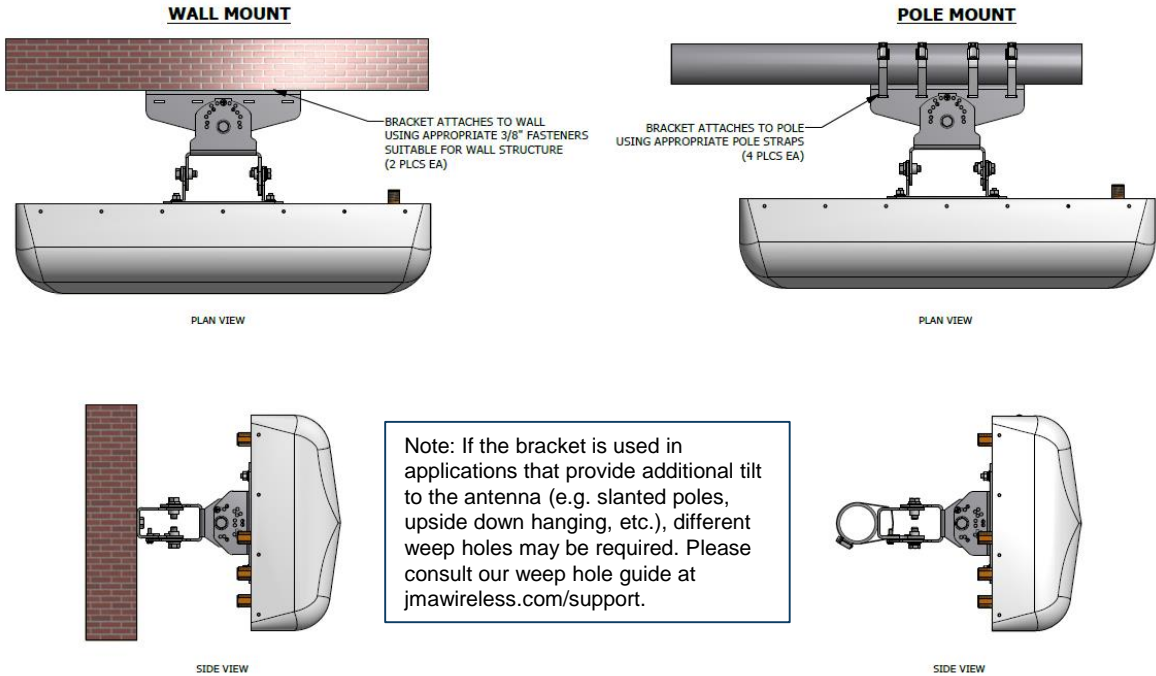


Mechanical Outline Drawing: XGU-FRO-230-I

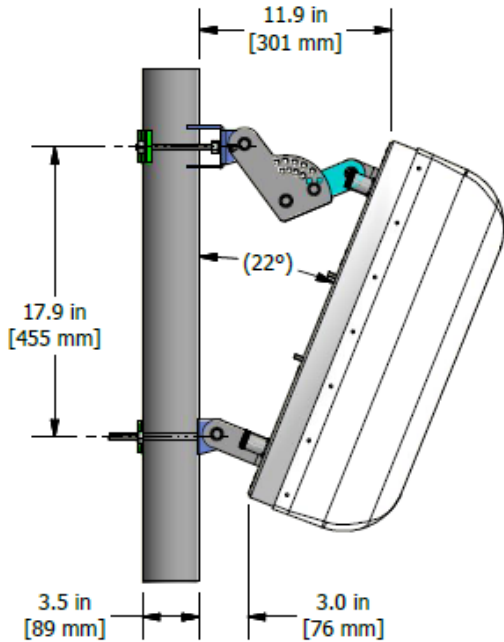


Examples of standard stadium bracket kit 919050 installation

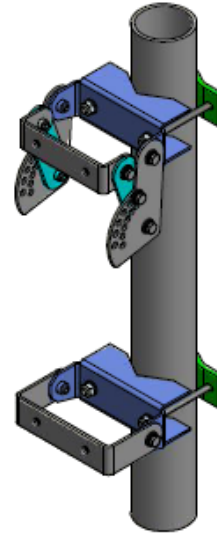
Note: For mounting details, refer to installation drawing, P/N 919050, on the JMA website Antenna Matrix.



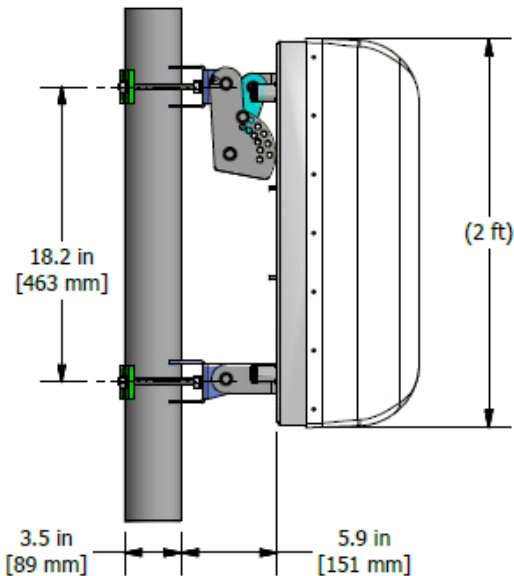
Optional bracket kit, 919017



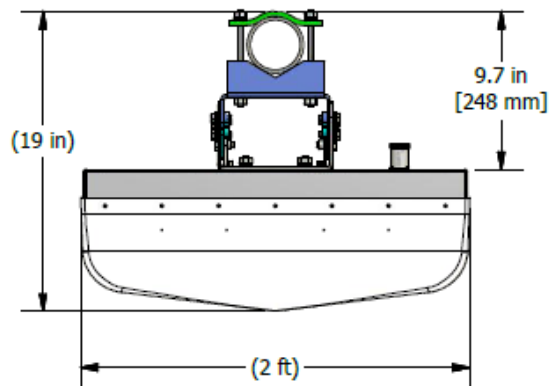
SIDE VIEW (22 DEG)
SCALE: 3/32



CSS PART # **919017**
2 POINT, 0-22 DEG DOWNTILT
3.5" MAX POLE SIZE



SIDE VIEW (0 DEG)
SCALE: 3/32



TOP VIEW (0 DEG)
SCALE: 3/32