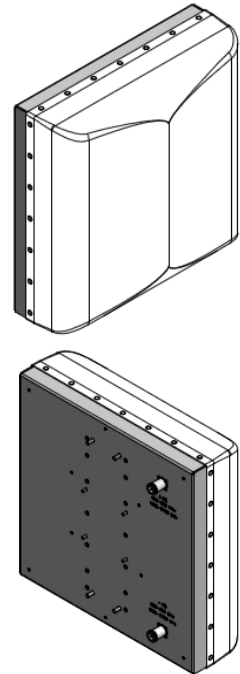


XGU-FRO-230

Antenna Systems Group



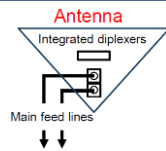
X-Pol Dual Band Antenna, 698-960/1695-2700 MHz
 30° horizontal beamwidth
 Fast Roll-Off "Spotlight"



- 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.

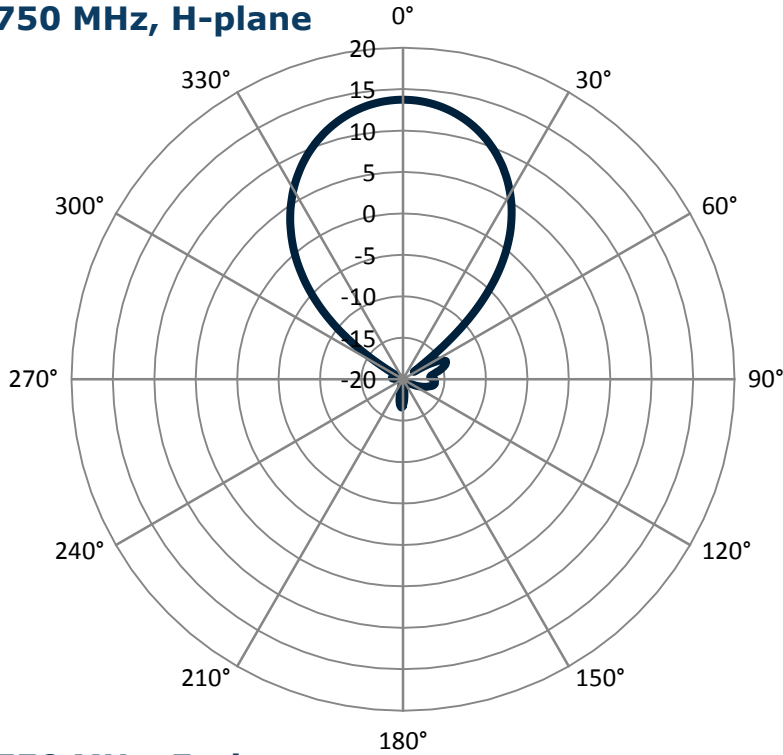
MECHANICAL SPECIFICATIONS

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)

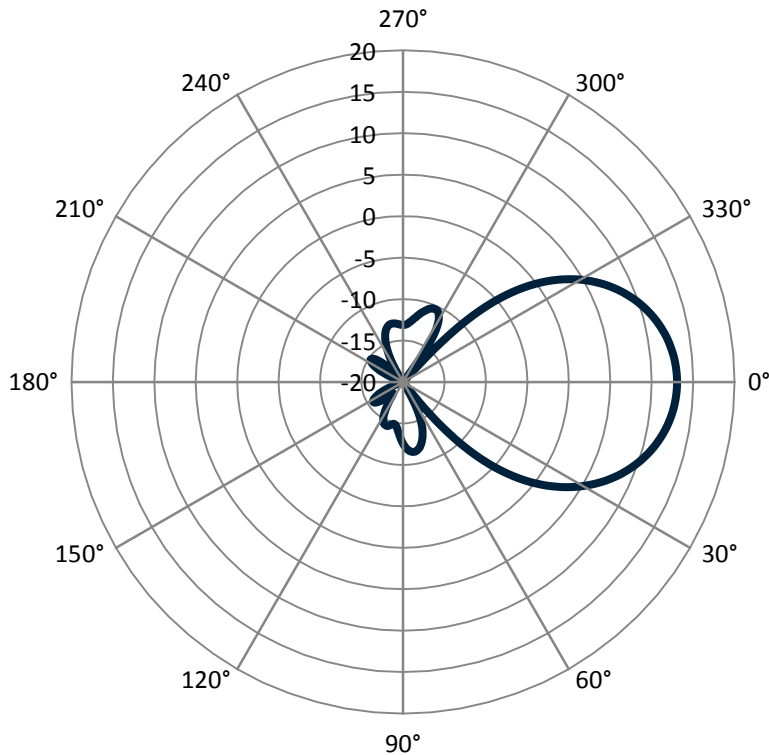
ORDER INFORMATION

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.

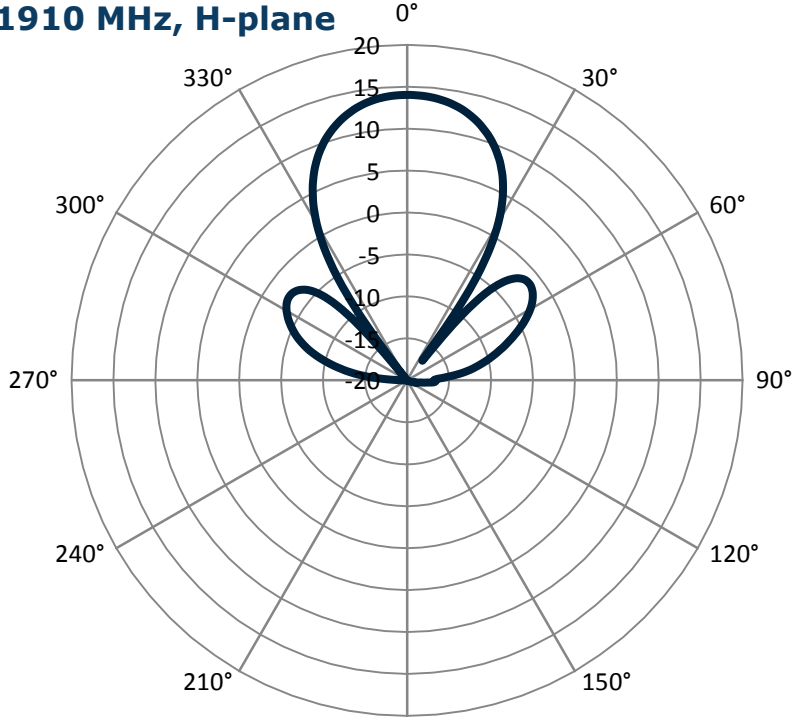
Pattern plot: 750 MHz, H-plane



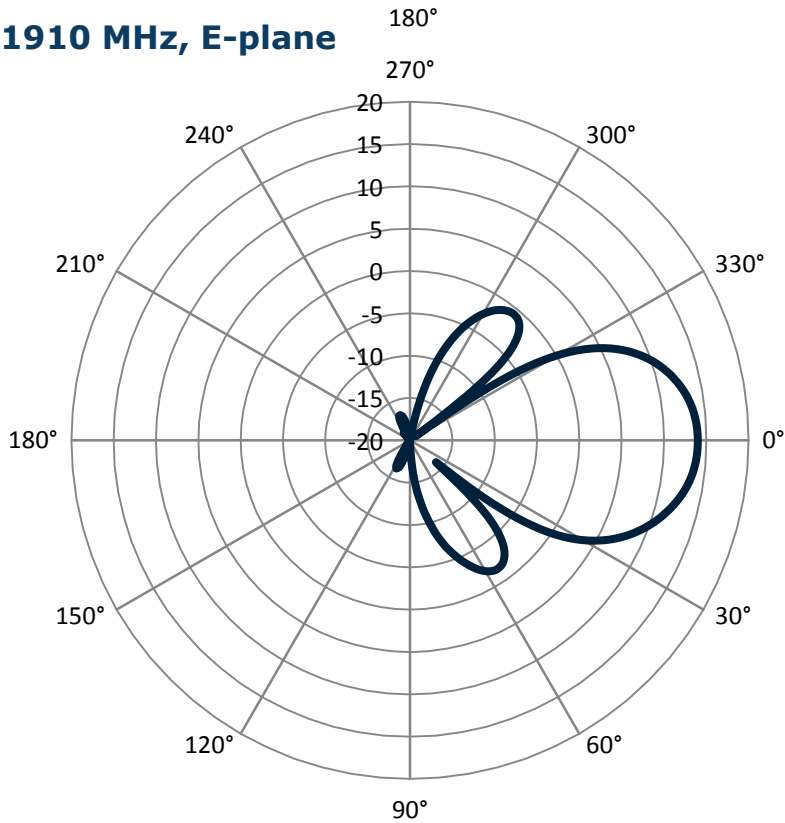
Pattern plot: 750 MHz, E-plane



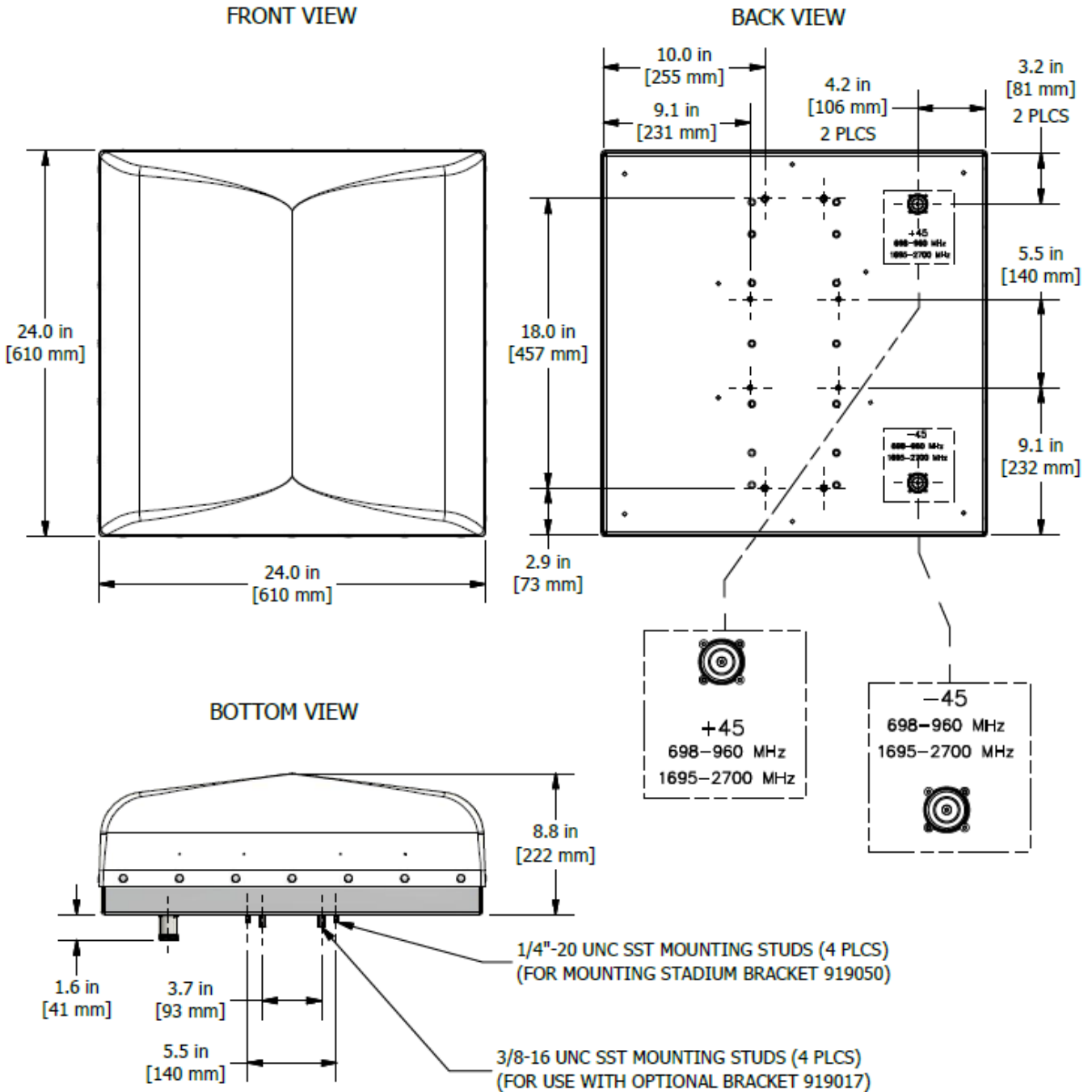
Pattern plot: 1910 MHz, H-plane



Pattern plot: 1910 MHz, E-plane

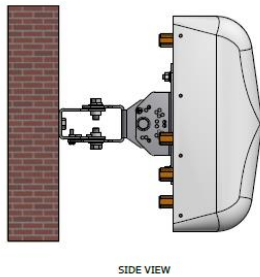
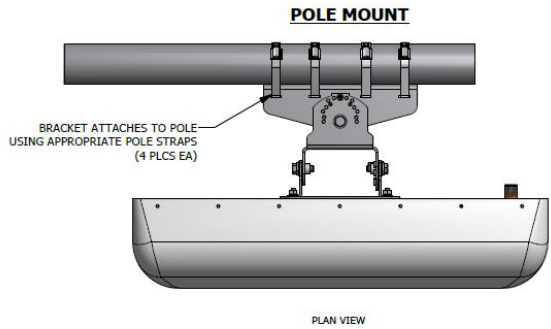
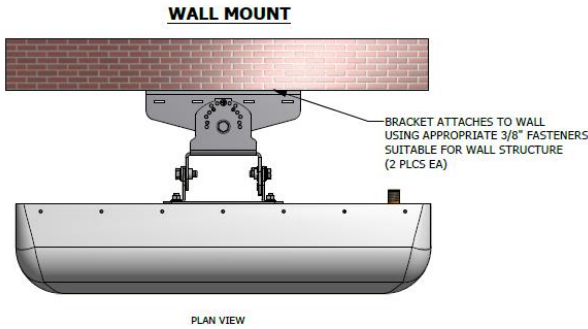


Mechanical Outline Drawing: XGU-FRO-230-I

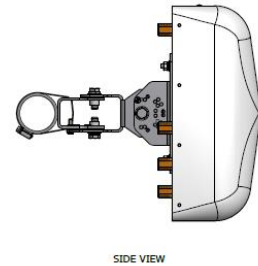


Examples of standard stadium bracket kit 919050 installation

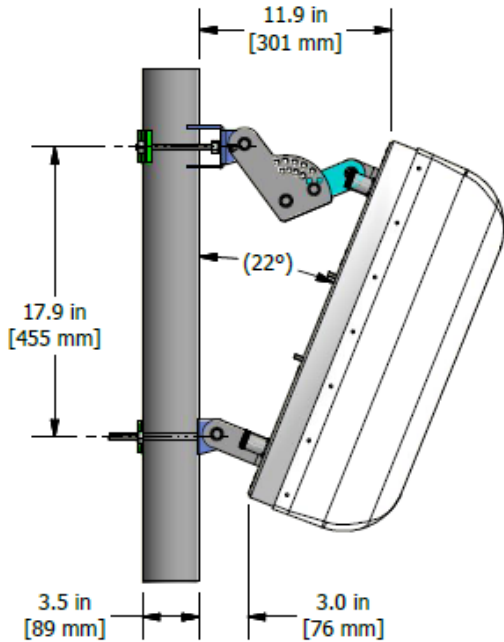
Note: For mounting details, refer to installation drawing, P/N 919050, on the JMA website Antenna Matrix.



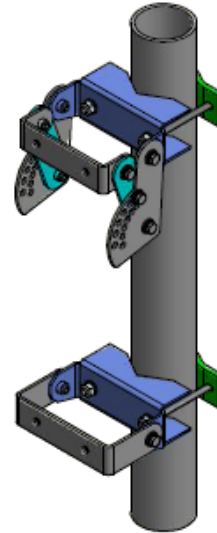
Note: If the bracket is used in applications that provide additional tilt to the antenna (e.g. slanted poles, upside down hanging, etc.), different weep holes may be required. Please consult our weep hole guide at jmawireless.com/support.



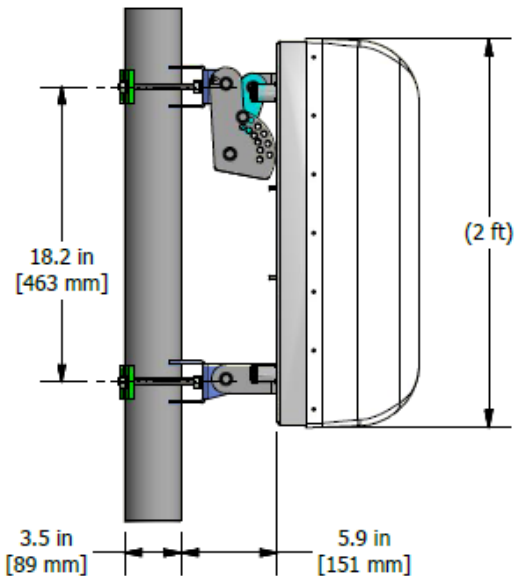
Optional bracket kit, 919017



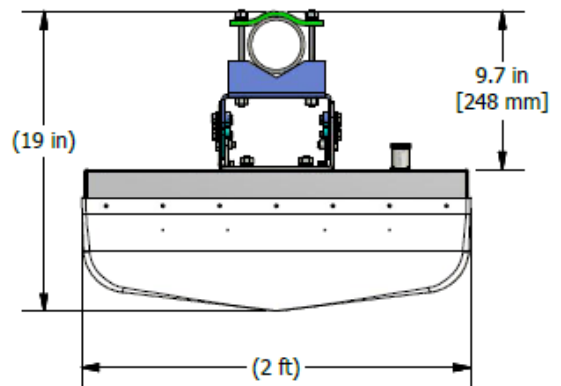
SIDE VIEW (22 DEG)
SCALE: 3/32



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