

# XGU-FRO-124

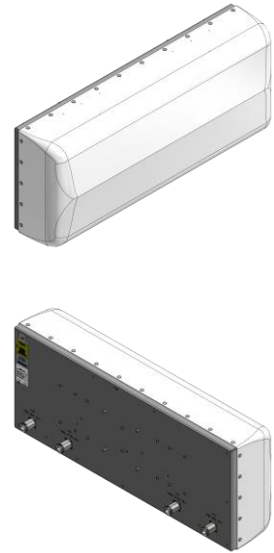
Antenna Systems Group

X-pol Dual Band Antenna, 698-960/1695-2700 MHz

36", 24° horizontal beamwidth

Fixed electrical tilt

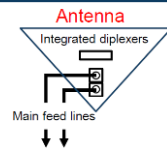
- Fast Roll-Off (FRO) improves intra- and inter-cell SINR
- Separate housing and reflector construction optimizes RF performance while maximizing mechanical strength
- Good passive intermodulation (PIM) performance reduces harmful interference
- Integrated diplexers minimizes cabling costs and improves aesthetics
- Included multi-position stadium bracket accommodates most mounting surfaces
- Suitable for LTE/CDMA/UMTS/GSM



**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† (average)	26°	24°	22°	26°	23°	20°
Gain, dBi	11.4	11.2	11.1	12.3	12.5	13.0
Vertical beamwidth, 3 dB points (average)	55°	49°	48°	64°	52°	50°
Azimuth sidelobe suppression, typical, dB	>18	>18	>18	>18	>18	>18
VSWR / return loss, dB, maximum	1.7/11.7	1.5/14.0	1.7/11.7	1.5/14.0	1.7/11.7	1.7/11.7
Polarization	+/-45°			+/-45°		
Electrical down tilt	0°			0°		
Isolation between ports, dB, minimum	>25			>25		
Intermodulation (2 x 20 w), IM3, dBc, maximum	-153			-153		
Impedance, ohms	50			50		
Maximum power per connector, CW (w)	250			125		

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

**MECHANICAL SPECIFICATIONS**

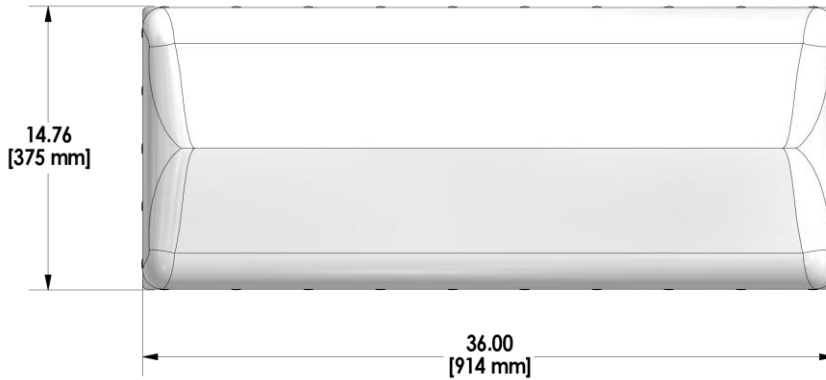
Dimensions, length/width/depth	14.8/36.0/8.0 in. (375/915/203 mm)
Connector (quantity) type	(2) 7-16 DIN female for diplexed and (4) for non-diplexed
Connector torque	220-265 lbf·in (23-30 N·m)
Connector location	Back
Antenna weight	18.0 lbs (8.2 kg)
Bracket weight	5.0 lbs (2.3 kg)
Standard bracket kit	919050 (included)
Mechanical down tilt range	+/- 20° lateral (azimuth) and +/- 55° vertical (up/down tilts)
Radome material	High strength Luran®, UV stabilized, ASTM D1925
Wind survival	120 mph (193 km/h)
Front wind load @ 100mph	90.8 lbf (404 N)
Equivalent flat plate @ 100 mph	1.81 sq ft (c=2)

**ORDER INFORMATION**

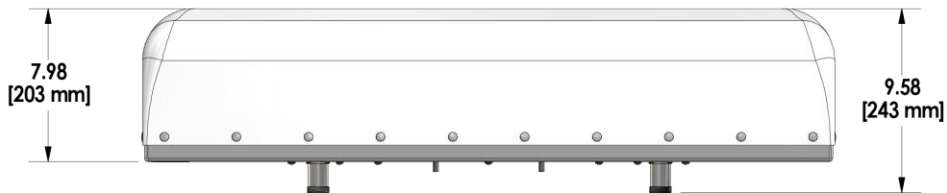
<b>MODEL</b>	<b>DESCRIPTION</b>
XGU-FRO-124-I	3' X-pol LB/HB 24° HBW, 0°/0° EDT with two DIN connectors and integrated diplexers
XGU-FRO-124	3' X-pol LB/HB 24° HBW, 0°/0° EDT with four DIN connectors
919055	Optional inverted mounting kit for 4.0-10.0 in. OD pole.
91900313	Optional bracket kit for extended horizontal and vertical tilt ranges.

## Mechanical Outline Drawing: XGU-FRO-124-I (internally diplexed)

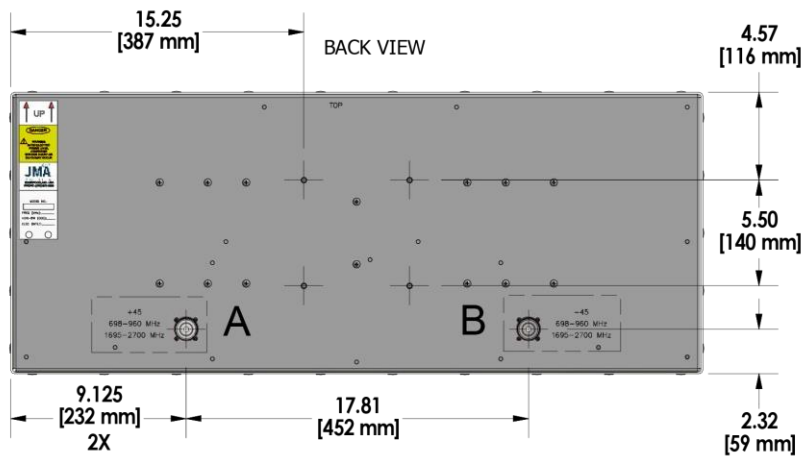
FRONT VIEW



BOTTOM VIEW



BACK VIEW

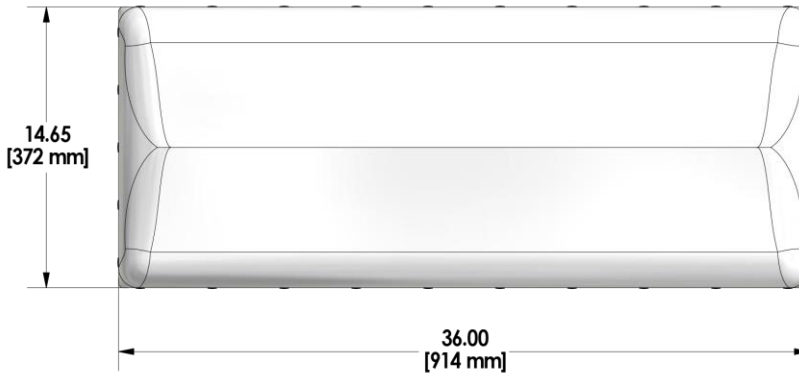


**DETAIL A**  
SCALE 5/16

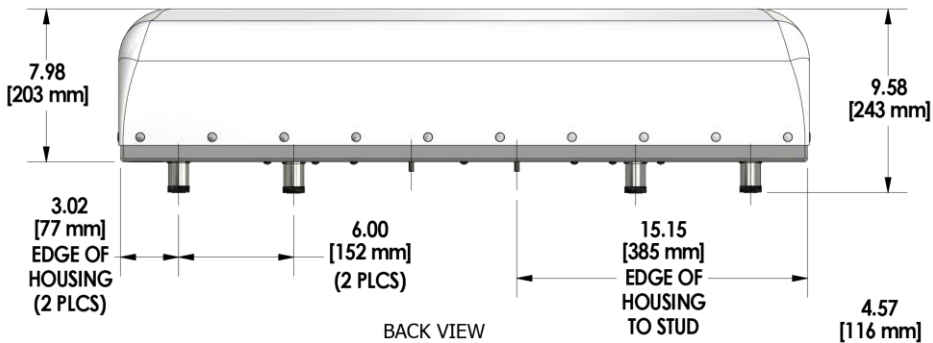


**DETAIL B**  
SCALE 5/16

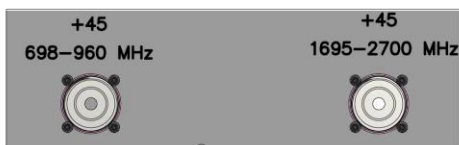
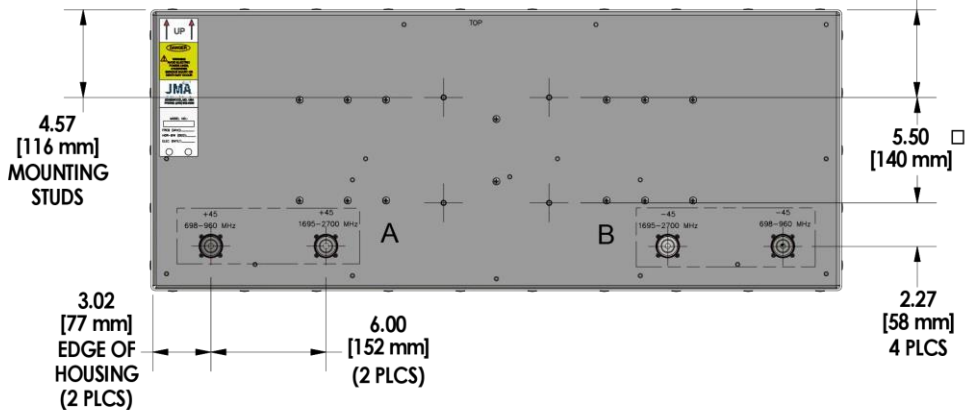
## Mechanical Outline Drawing: XGU-FRO-124 (non diplexed)



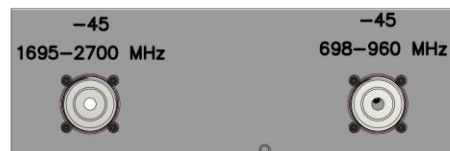
BOTTOM VIEW



BACK VIEW



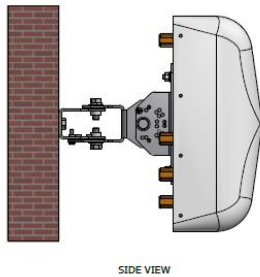
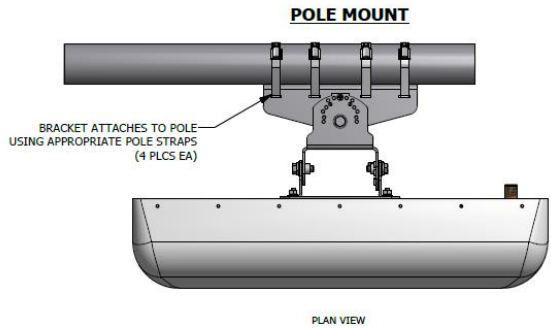
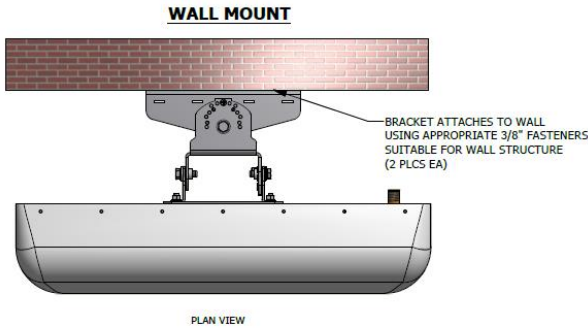
DETAIL: A  
SCALE: 5/16



DETAIL: B  
SCALE: 5/16

## 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](http://jmawireless.com/support).

