

36" 8-Port 8T8R C-Band M-MIMO Base Station Panel Antenna [3300-4200 MHz]

GP3608-B7429

Description:

- 8-Port M-MIMO Antenna for High Capacity Area Coverage
- 8T8R Beamforming in C-Band, 3300-4200 MHz
- RET Downtilt for Coverage Optimization
- Calibration Port Included
- AISG 2.0 0-10° Downtilt Control
- Azimuth $\pm 30^\circ$ Scan Angle



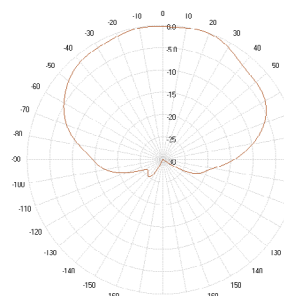
3300-4200 MHz
8-Port 8T8R M-MIMO Base Station Panel Antenna

Common M-MIMO Specifications			
Frequency Range (MHz)	3300 - 4200		
Electrical Downtilt Range (°)	0-10 (x1 RET)		
VSWR/Return Loss (max./dB min.)	1.5:1 / 14.0		
Port to Port Isolation (dB, min.)	25		
PIM @ 2x43 dBm (dBc, max.)	-150		
Power per Port (W)	75		
Polarization (°)	± 45		
Calibration Network Specifications	3300 - 3400 MHz	3400 - 3700 MHz	3700 - 4200 MHz
Calibration Network Coupling Factor (dB)	26 $\pm$ 2	26 $\pm$ 2	26 $\pm$ 2
Calibration Network Amplitude Deviation (dB, max.)	0.9	0.9	0.9
Calibration Network Phase Deviation (°, max.)	7.0	7.0	7.0
Single Column Specifications	3300 - 3400 MHz	3400 - 3700 MHz	3700 - 4200 MHz
Gain (dBi, max.)	16.5	16.6	17.1
Gain (dBi, avg.)	15.7	15.9	16.0
Horizontal Beamwidth (°)	100	101	89
Vertical Beamwidth (°)	6.7	6.2	5.7
First Upper Sidelobe (dB)	18	18	18
Front-to-Back Ratio, 180° (dB)	35	35	35
Cross-Polar Discr. at Boresight (dB)	19	23	25
Broadcast Beam Specifications	3300 - 3400 MHz	3400 - 3700 MHz	3700 - 4200 MHz
Gain (dBi, max.)	17.1	17.6	18.4
Gain (dBi, avg.)	16.6	17.0	17.2
Horizontal Beamwidth (°)	76	68	58
Vertical Beamwidth (°)	6.6	6.2	5.7
First Upper Sidelobe (dB)	18	18	18
Front-to-Back Ratio, 180° (dB)	35	35	35

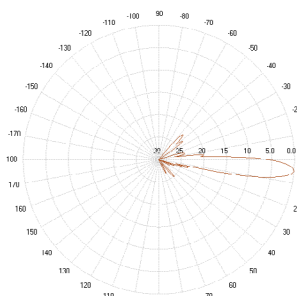
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Service Beam Specifications	3300 - 3400 MHz			3400 - 3700 MHz			3700 - 4200 MHz		
Azimuth Scan Angle (°)	0	±15	±30	0	±15	±30	0	±15	±30
Gain (dBi, max.)	21.3	21.3	20.4	21.8	21.8	21.1	21.8	21.7	21.0
Gain (dBi, avg.)	21.1	20.8	20.0	21.3	21.1	20.3	21.2	21.0	20.0
Horizontal Beamwidth (°)	28	29	32	26	28	31	24	26	28
Vertical Beamwidth (°)	6.6	6.6	6.6	6.2	6.2	6.2	5.7	5.7	5.7
First Upper Sidelobe (dB)	18			18			18		
Front-to-Back Ratio, 180° (dB)	40			40			40		
Cross-Polar Discr. at Boresight (dB)	21			24			25		

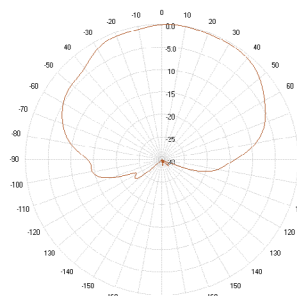
2D Antenna Patterns at EDT5°



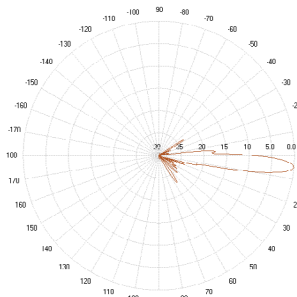
3350 MHz



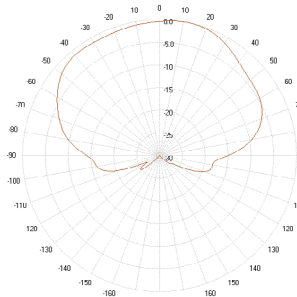
3400 MHz



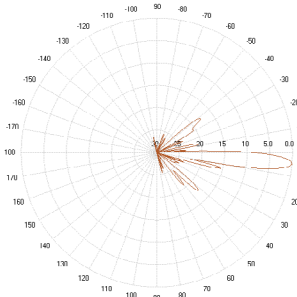
3600 MHz



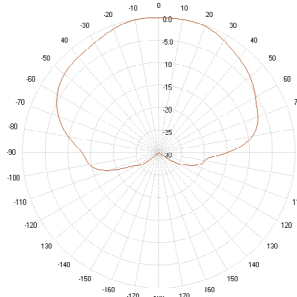
3700 MHz



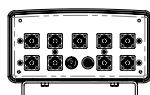
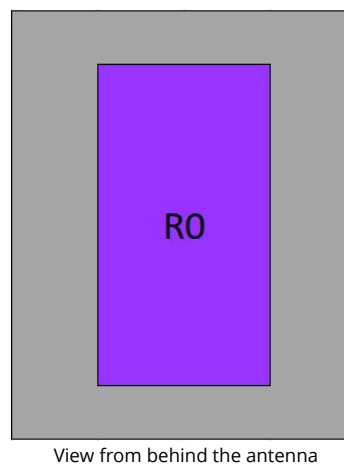
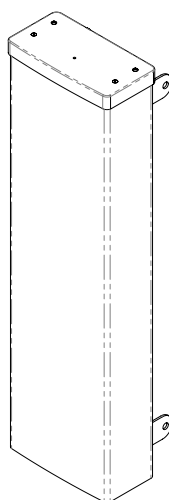
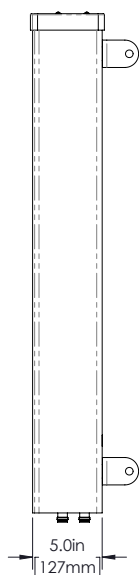
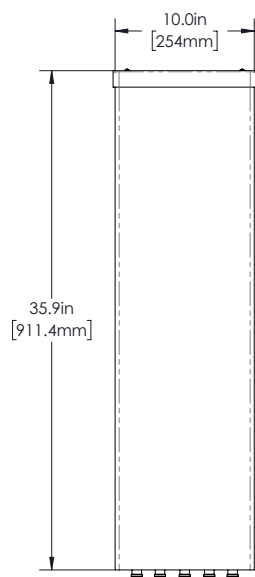
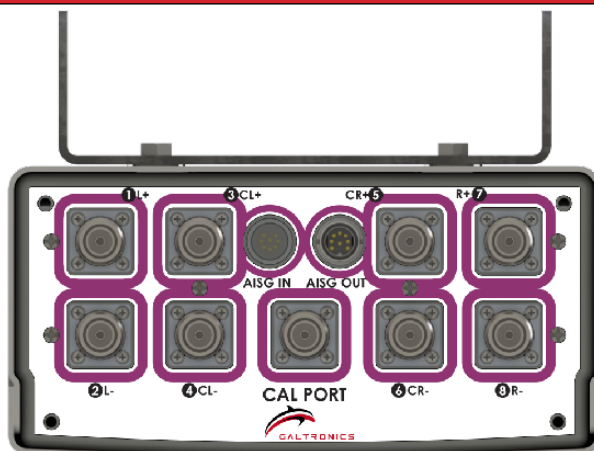
3840 MHz



3900 MHz



Antenna Bottom Plate, RET Designation Details and Outline



Mating Connector Torque:
4.3-10: 3.7 ft-lb (5 Nm)

RET Configuration & Designators

Frequency Range	Controller	RET Designator	Ports	Electrical Tilt
3300-4200 MHz	C1	R0	1-8	0° - 10°

Mechanical Specifications	
Operating Temperature	-40° to 158°F (-40° to +70°C)
Antenna Weight	22.5 lbs (10.2 kg)
Mounting Bracket Weight	13.4 lbs (6.1 kg)
Antenna Dimension (Height x Width x Depth)	35.9" (913 mm) x 10.0" (254 mm) x 5.0" (127.3 mm)
Connectors, RF, C-band	8x 4.3-10 (F)
Connector, RF, Calibration, C-band	1x 4.3-10 (F)
Connectors, AISG	1x 8-Pin (-M) per IEC 60130-9 1x 8-Socket (-F) per IEC 60130-9
Total Connector Quantity	9x 4.3-10 (F) / 2x AISG 8-Terminal Connectors
Radome Material	ASA
RET Specification	Internal, AISG 2.0
Internal RET	C-Band (x1)
Radome Color	Gray
Wind Load, Front (@ 150 km/h)*	309 N / 69 lbf
Wind Load, Side (@ 150 km/h)*	174 N / 39 lbf
Wind Load, Maximum (@ 150 km/h)*	341 N / 77 lbf
Wind Survival Rating	150 mph (241 km/h)

* Wind load based on calculations according to TIA-222-G

Part Numbers & Ordering Options	
Description	Part Number
8-Port M-MIMO Antenna with 8x 4.3/10 (F) Connectors, Gray (Including MK-06989 Wall/Pole Mounting Bracket)	GP3608-B7429-112
Mounting Brackets:	Part Number:
Heavy Duty Mounting Bracket (wind speed of 150 mph) [Included] The MK-6989 standard mounting bracket allows for easy installation of any Galtronics Base Station Antenna to a macro tower structure. It provides 0°-10° of mechanical downtilt adjustability, and fits pole diameters ranging from 3" to 5". Note: The MK-06989 mounting bracket can also be ordered separately.	 MK-06989

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