GALTRONICS

2’ 48-Port Directional Tri-Sector Canister Antenna [1695-2690, 3300-4200 MHz]

GC2448-07775

Description:

- Tri-sector 48-Port Antenna for High Capacity Area Coverage
- 65° beamwidth Dual-Polarized Design Covering AWS, PCS, WCS and BRS bands
- 24x ports (8 ports per sector) covering 1695-2690 MHz
- 3x 8T8R M-MIMO Array (one per sector) for C-band 3300-4200 MHz
- 3 Calibration Ports (one per sector) for C-band M-MIMO Array

2’ 48-Port Directional Tri-Sector Canister Antenna
1695-2690, 3300-4200 MHz

Electrical Specifications:

Frequency Range (MHz)	1695-2200	2305-2360	2496-2690
Gain, Max. (dBi)	12.3	12.7	12.9
Gain, Avg. (dBi)	11.3	12.0	12.2
AZ Beamwidth (°)	74	67	73
Elevation Beamwidth (°)	28.9	23.8	21.0
Electrical Downtilt (°)	0 Fixed		
First Upper Sidelobe Suppression (dB)	20	19	16
Front-to-Back Ratio, 180° (dB)	32		
Cross-Polar Discr. at Mech. Boresight (dB)	23		
Isolation (dB, min.)	25		
PIM @ 2x43 dBm (dBc, max.)	-153		
Power per Port (W)	100		

Electrical Specifications: C-Band M-MIMO

Frequency Range (MHz)	3300-4200		
Gain, Single Column, Max./Avg. (dBi)	15.3 / 13.9		
AZ Beamwidth, Single Column (°)	86		
Elevation Beamwidth, Single Column (°)	9.5		
Gain, Broadcast Beam, Max./Avg. (dBi)	16.7 / 15.5		
AZ Beamwidth, Broadcast Beam (°)	63		
Elevation Beamwidth, Broadcast Beam (°)	9.4		
First Upper Sidelobe, Broadcast Beam (dB)	22		
Front-to-Back Ratio, Broadcast, 180° (dB)	37		
XPD at Mech. Boresight, Broadcast (dB)	24		
Electrical Downtilt Range	6° Fixed		
Calibration Network Coupling Factor (dB)	26±2.0		
Calibration Network Amplitude Deviation (dB)	< 1.2 (3300-3550 MHz)	< 1.0 (3550-4200 MHz)	
Calibration Network Phase Deviation (°)	< 7.0		
Isolation (dB, min.)	25		
PIM @ 2x43 dBm (dBc, max.)	-145		
Azimuth Scan	0°	+/-15°	+/-30°
Gain, Service Beam, Max./Avg. (dBi)	19.9 / 19.0	19.7 / 18.8	18.7 / 18.0
AZ Beamwidth, Service Beam (°)	26.4	27.3	30.0
Elevation Beamwidth (°)	9.4	9.4	9.3
Service Beam AZ SLL (dB)	16.2	17.5	11.9
Power per Port (W)	75		

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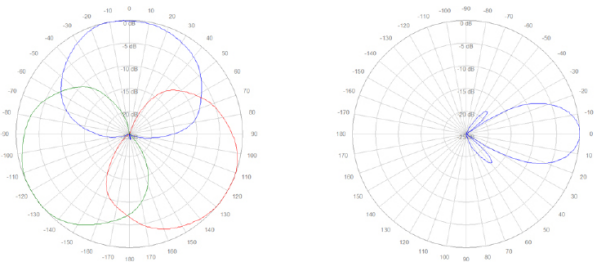
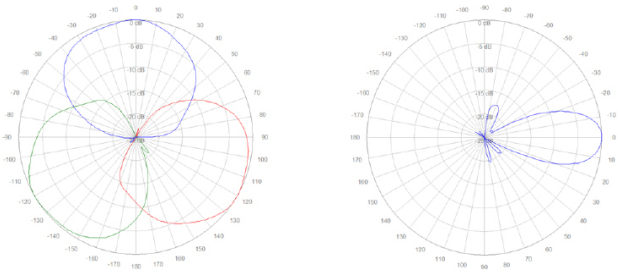
Common Electrical Specifications (All Ports)	
VSWR / Return Loss (dB)	1.5:1 / 14.0
Polarization	Dual slant 45° (±45°)
Impedance (Ω)	50

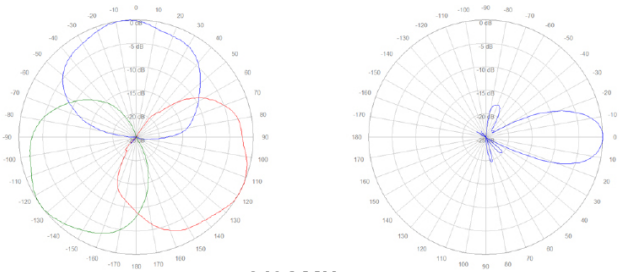
2D Antenna Patterns



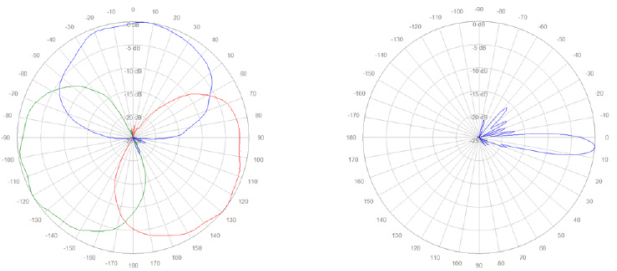
1843 MHz



2310 MHz



2496 MHz



3900 MHz

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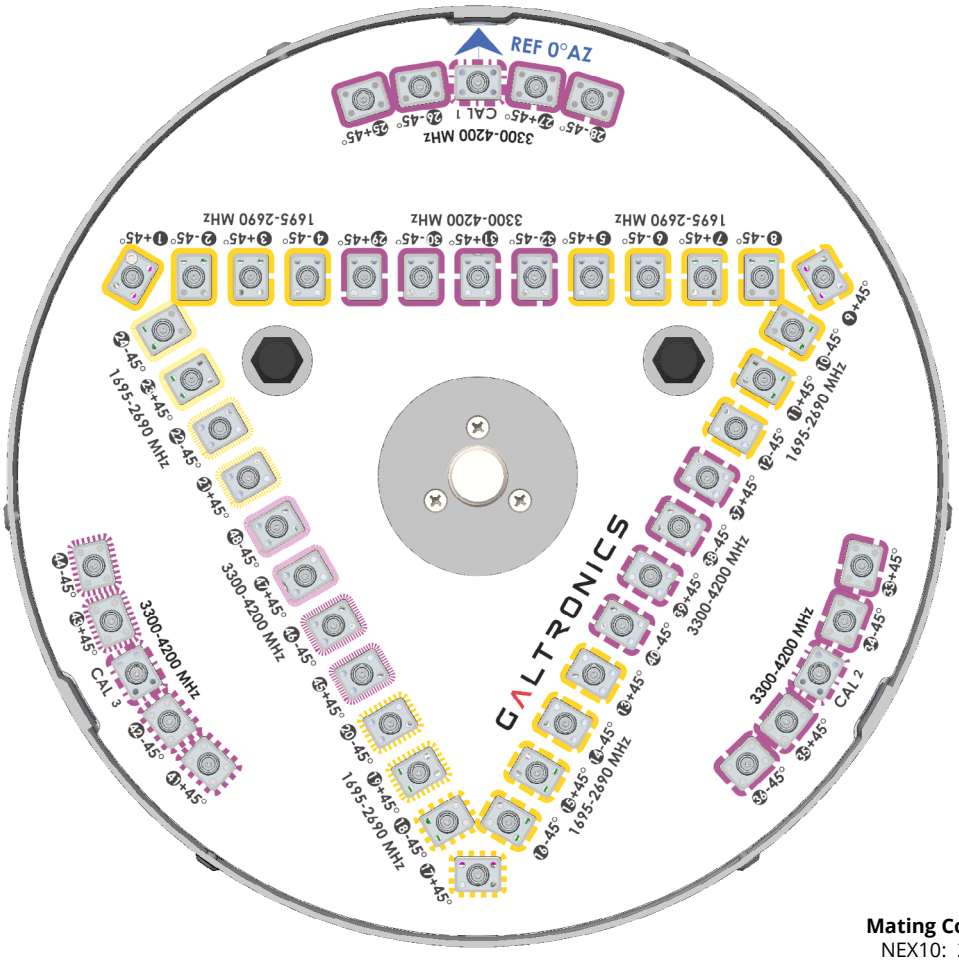
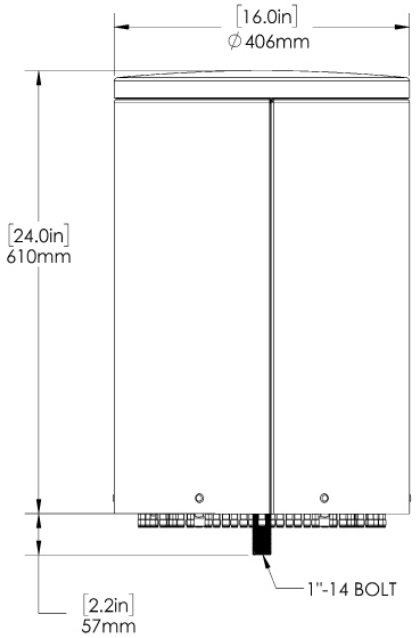
Bottom Plate Details



Mating Connector Torque:
NEX10: 2.2 ft-lb (3.0 Nm)

Antenna Outline



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Mechanical Specifications

Operating Temperature	-40° to 158°F (-40° to +70°C)
Antenna Weight	29 lbs (13.2 kg)
Mounting Bracket Weight	9.5 lbs (4.3 kg)
Antenna Dimension (Height x Diameter)	24" (610 mm) x 16" (406.4 mm)
Connectors, RF, 1695-2690 MHz	24x NEX10 (F)
Connectors, RF, 3300-4200 MHz	24x NEX10 (F)
Connectors, RF, 3300-4200 MHz, Calibration (M-MIMO)	3x NEX10 (F)
Radome Material	ASA
Radome Color	Gray
Environment Rating	Outdoor
Wind Load, Front (@ 150 km/h)*	185 N / 41 lbf
Wind Load, Side (@ 150 km/h)*	185 N / 41 lbf
Wind Survival Rating	150 mph (241 km/h)

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

Part Numbers & Ordering Options

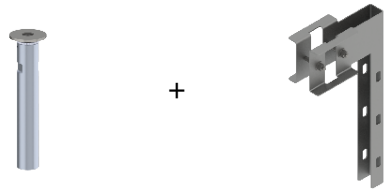
Description	Color	Mounting Kit	Part Number
48-Port Directional Tri-Sector Canister Antenna with 51x NEX10 (F) Connectors	Gray	Includes MK-06761 mounting kit	GC2448-07775-112

Mounting Brackets & Optional Accessories

Mounting Kit Assembly, Canister, Pole Top (wind speed of 150 mph)

The assembly kit includes a 1" Mount Rod Adapter (MK-06678: universal interface for pole top installation) and a Pole Top Mounting Bracket (MK-06679: a bracket base attached directly to wood, metal and cement poles).

Note: 1" Rod Adapter (MK-06678) and Pole Top Mounting Bracket (MK-06679) may be ordered separately.



MK-06761

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