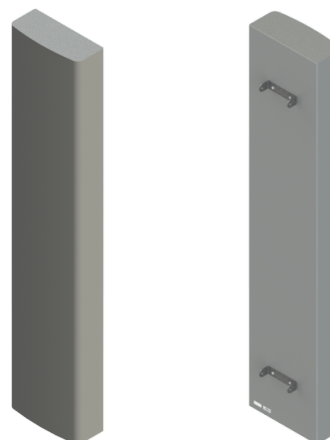


## 8' 20-Port Base Station Panel Antenna, 65° 698-896MHz/1695-2360MHz & 8T8R M-MIMO 3700-4000 MHz

# GP9620-07352

### Description:

- Single-sector 20-Port Antenna for High Capacity Area Coverage
- 65° beamwidth Dual-Polarized Design Covering 700/850 MHz, AWS, PCS and WCS with Integrated High Band 8T8R M-MIMO Capability
- 4x4 MIMO in Low Band, 698-896 MHz
- 8x8 MIMO in Mid Band, 1695-2360 MHz
- 8T8R Beamforming 3700-4000 MHz High Band
- RET Downtilt in all Bands for Coverage Optimization
- Calibration Port Included for M-MIMO Array
- Separate AISG Controllers for Low/Mid and M-MIMO arrays



65° 698-896MHz/1695-2360MHz  
8T8R M-MIMO 3700-4000 MHz  
8' Base Station Panel Antenna

### Low and Mid Band Specifications

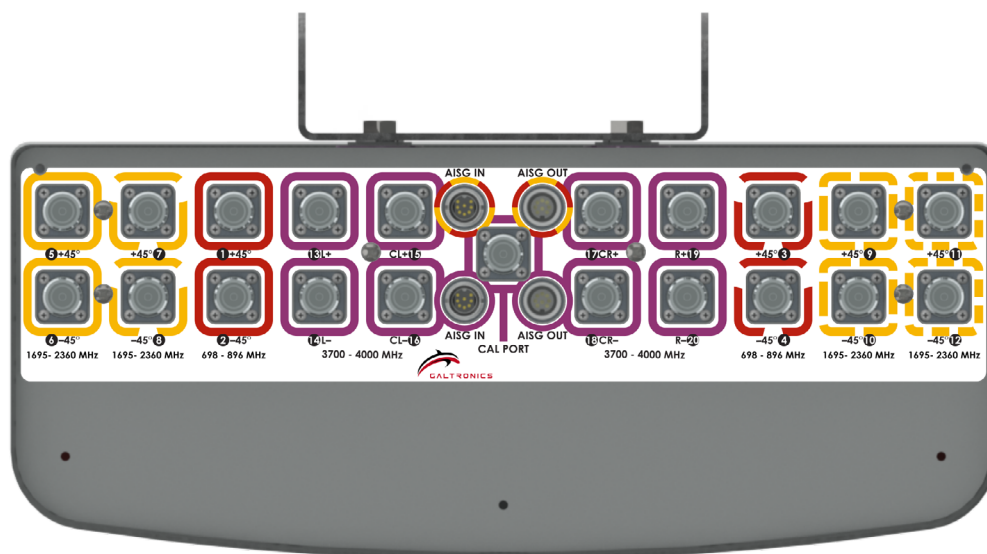
| Frequency Range (MHz)                      | 698-806       | 806-896 | 1695-2200     | 2305-2360 |
|--------------------------------------------|---------------|---------|---------------|-----------|
| Gain, Max. (dBi)                           | 15.7          | 16.2    | 17.1          | 17.3      |
| Gain, Avg. (dBi)                           | 14.8          | 15.5    | 16.0          | 16.5      |
| AZ Beamwidth (°)                           | 58            | 52      | 63            | 56        |
| Elevation Beamwidth (°)                    | 10.4          | 9.3     | 7.2           | 6.0       |
| Electrical Downtilt Range (°)              | 0-10 (x1 RET) |         | 2-12 (x2 RET) |           |
| First Upper Sidelobe Suppression (dB)      | 18            | 19      | 16            | 19        |
| Front-to-Back Ratio, 180° (dB)             | 38            | 35      | 38            | 43        |
| Cross-Polar Discr. at Mech. Boresight (dB) | 28            | 26      | 20            | 24        |
| PIM @ 2x43 dBm (dBc, max.)                 | -153          |         |               |           |
| VSWR (max.) / RL (dB, min.)                | 1.5:1 / 14.0  |         |               |           |
| Port to Port Isolation (dB, min.)          | 25            |         |               |           |
| Polarization (°)                           | ±45           |         |               |           |
| Power per Port (W)                         | 300           |         | 200           |           |

### M-MIMO Array Specifications

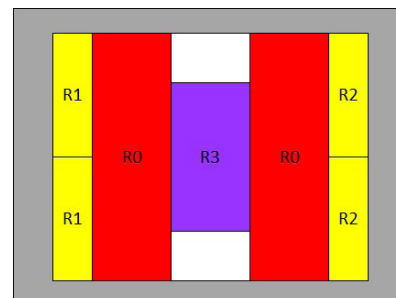
| Frequency Range (MHz)          | 3700-4000 |
|--------------------------------|-----------|
| <b>Single Column</b>           |           |
| Gain (dBi, max.)               | 15.8      |
| Gain (dBi, avg.)               | 14.5      |
| AZ Beamwidth (°)               | 85        |
| First Upper Sidelobe (dB)      | 17        |
| Front-to-Back Ratio, 180° (dB) | 35        |
| XPD at Mech. Boresight (dB)    | 20        |
| <b>Broadcast Beam</b>          |           |
| Gain (dBi, max.)               | 16.9      |
| Gain (dBi, avg.)               | 15.8      |
| AZ Beamwidth (°)               | 65        |
| First Upper Sidelobe (dB)      | 18        |
| Front-to-Back Ratio, 180° (dB) | 39        |
| XPD at Mech. Boresight (dB)    | 20        |

| Service Beam                                 | 0° AZ Scan    | +/-15° AZ Scan | +/-30° AZ Scan |
|----------------------------------------------|---------------|----------------|----------------|
| Gain (dBi, max.)                             | 20.7          | 20.4           | 20.1           |
| Gain (dBi, avg.)                             | 19.4          | 19.4           | 18.8           |
| AZ Beamwidth (°)                             | 26.8          | 28.7           | 28.2           |
| Service Beam Azimuth Scanning Range (°)      | +/- 30        |                |                |
| First Upper Sidelobe (dB)                    | 17            | 18             | 17             |
| Front-to-Back Ratio, 180° (dB)               | 35            | 35             | 35             |
| XPD at Mech. Boresight (dB)                  | 18            | 20             | 18             |
| Common M-MIMO Specifications                 |               |                |                |
| Calibration Network Coupling Factor (dB)     | 26.0          |                |                |
| Calibration Network Amplitude Deviation (dB) | ≤ 2.0         |                |                |
| Calibration Network Phase Deviation (°)      | ≤ 5.0         |                |                |
| Elevation Beamwidth (°)                      | 5.6           |                |                |
| 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           |                |                |

## Bottom Plate & RET Designation Details

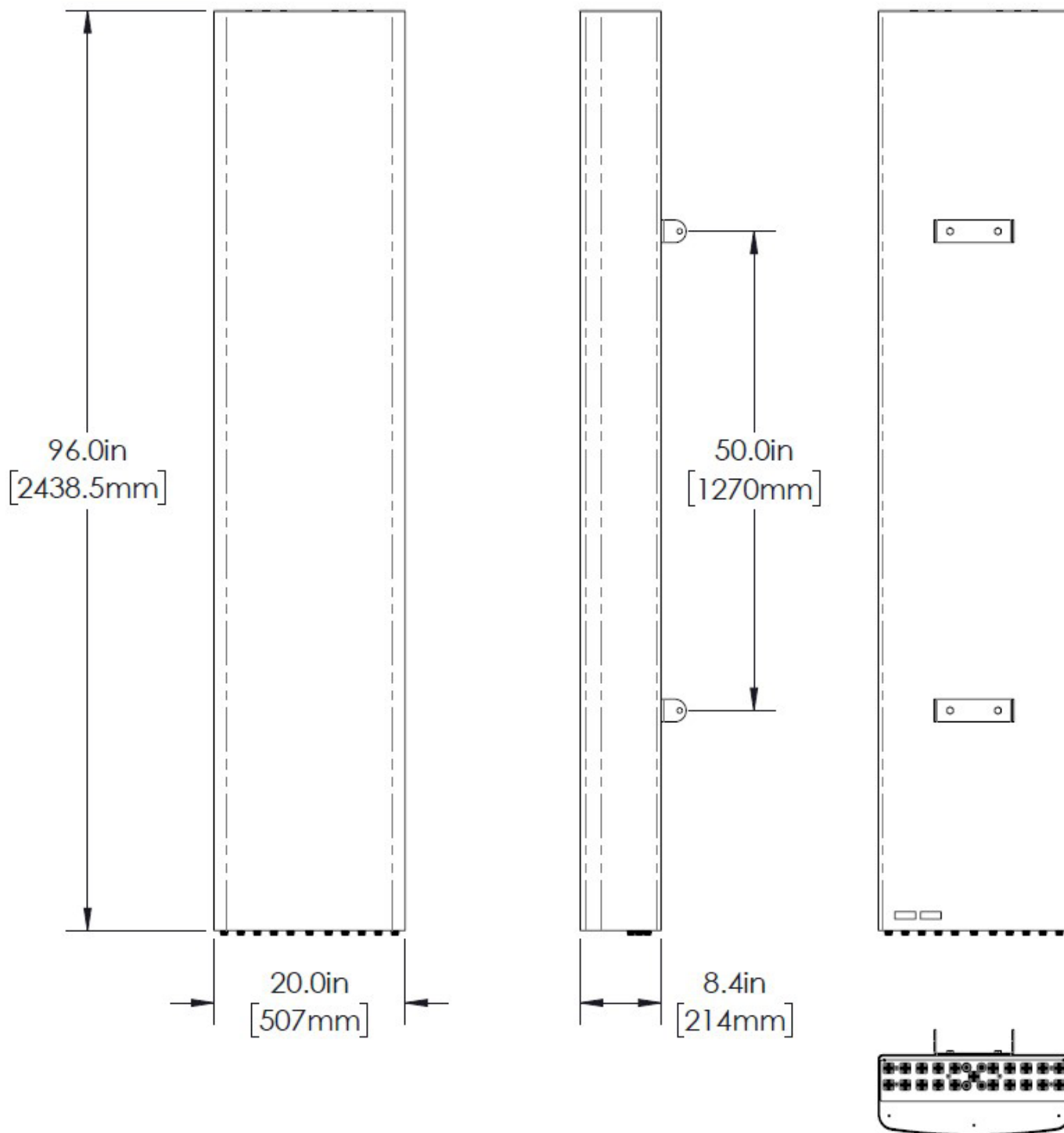


| RET Configuration & Designators |            |                |       |                 |
|---------------------------------|------------|----------------|-------|-----------------|
| Frequency Range                 | Controller | RET Designator | Ports | Electrical Tilt |
| 698-896 MHz                     | C0         | R0             | 1-4   | 0° - 10°        |
| 1695-2360 MHz                   |            | R1             | 5-8   | 2° - 12°        |
| 1695-2360 MHz                   |            | R2             | 9-12  | 2° - 12°        |
| 3700-4000 MHz                   | C1         | R3             | 13-20 | 0° - 10°        |



View from behind the antenna

## Antenna Outline



RFD# 7352 : Revision: R5 : Release Date: March 22, 2021;

| Mechanical Specifications                    |                                                       |
|----------------------------------------------|-------------------------------------------------------|
| Operating Temperature                        | -40° to 158°F (-40° to +70°C)                         |
| Antenna Weight                               | 101 lbs (45.9 kg)                                     |
| Mounting Bracket Weight                      | 14.0 lbs (6.3 kg)                                     |
| Antenna Dimension (Height x Width x Depth)   | 96" (2438 mm) x 20" (507 mm) x 8.4" (214 mm)          |
| Connectors, RF, Low Band                     | 4x 4.3-10 (F)                                         |
| Connectors, RF, Mid Band                     | 8x 4.3-10 (F)                                         |
| Connectors, RF, M-MIMO High Band             | 8x 4.3-10 (F)                                         |
| Connector, RF, Calibration, M-MIMO High Band | 1x 4.3-10 (F)                                         |
| Connectors, AISG                             | 2x 8-Pin (-M) & 2x 8-Socket (-F) per IEC 60130-9      |
| Total Connector Quantity                     | 21x 4.3-10 (F) / 4x AISG 8-Terminal Connectors        |
| Radome Material                              | ASA                                                   |
| RET Specification                            | Internal, AISG 2.0                                    |
| Internal RET                                 | Low Band (x1) / Mid Band (x2) / M-MIMO High Band (x1) |
| Radome Color                                 | Gray                                                  |
| Wind Load, Front (@ 150 km/h)*               | 1714.3 N / 385 lbf                                    |
| Wind Load, Side (@ 150 km/h)*                | 859 N / 193 lbf                                       |
| Wind Load, Maximum (@ 150 km/h)*             | 1836.7 N / 413 lbf                                    |
| Wind Survival Rating                         | 150 mph (241 km/h)                                    |

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

| Part Numbers, Ordering Options and Accessories                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                       |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|
| Description                                                                                                                                                                                                                                                                                                                                                                                                                  | Part Number                                                                                           |
| <b>20-Port Antenna with 20x 4.3-10 (F) Connectors, Gray (Including MK-07286 Wall/Pole Mounting Bracket)</b>                                                                                                                                                                                                                                                                                                                  | GP9620-07352-112                                                                                      |
| <b>Mounting Brackets:</b>                                                                                                                                                                                                                                                                                                                                                                                                    | <b>Part Number:</b>                                                                                   |
| <b>Heavy Duty Mounting Bracket (wind speed of 150 mph) [Included]</b><br><br>The MK-07286 standard mounting bracket allows for easy installation of any Galtronics 6' or 8' Base Station Antenna to a macro tower structure. It provides 0°-10° of mechanical downtilt adjustability, and fits pole diameters ranging from 2.375" to 4.5".<br><br><b>Note:</b> The MK-07286 mounting bracket can also be ordered separately. | <br><br>MK-07286 |
| <b>Heavy Duty Mounting Bracket (wind speed of 150 mph) [Optional]</b><br><br>The MK-06807 optional mounting bracket allows for easy installation of any Galtronics 6' or 8' 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".                                                                                         | <br><br>MK-06807 |

RFD# 7352 : Revision: R5 : Release Date: March 22, 2021;