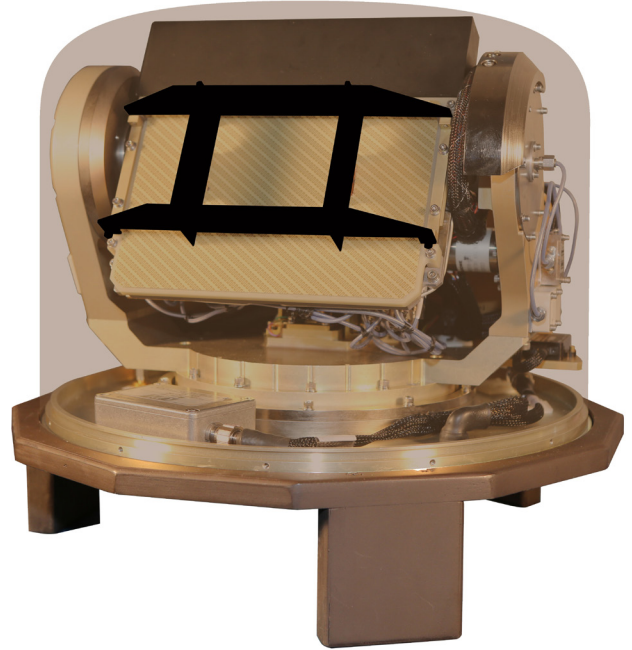


# Model **GMA-100QB**

## Quad Band On-The-Move Antenna

### Features:

- Quad Band (L, S, C, and Ku)
- Bi-Directional in All Bands
- RSSI for Rapid Signal Location and Acquisition
- Built-In RF Electronics
- Churchville B Capable Ground OTM
- Self-Contained Automatic Heading Reference Sensor (AHRS)
- 2-Axis Directional High Gain Antenna and Omnidirectional Antenna
- Serial and Ethernet Command Interfaces



The GMA-100QB antenna system provides on-the-move (OTM) line of sight (LOS) bi-directional communications capability for ground vehicles to link to UAVs in L, S, C, and Ku-bands. Capable of Churchville B OTM performance, the GMA-100QB is equipped with high performance motors/drives on both axes to easily handle the high dynamic loads, and is stabilized by internal AHRS, allowing full independence from vehicle data. The receiver with built in Received Signal Strength Indicator (RSSI) allows the antenna to rapidly scan the sky for all available signals and quickly point to the desired airborne asset, eliminating the delay of external

modem decoding of the signal. Embedded amplifiers on transmit/receive at all bands allow a full communications system with only the addition of external DC power and a modem.

The GMA-100QB includes both a compact multiband high gain directional antenna array, enabling long range LOS datalinks, and a broadband omnidirectional antenna for close-in/overhead communications. Frequency band and antenna selection is electronically commanded.

# Model **GMA-100QB** - Quad Band On-The-Move Antenna

## Specifications\*

### KEY PERFORMANCE VALUES WITH STANDARD HARDWARE COMPLEMENT

RF/Electrical Parameters	L/S-band	C-band	Ku-band
Frequency Range	1.6 - 2.5 GHz	4.4 - 5.85 GHz	14.4 - 15.35 GHz
Gain (Typical)	7-9 dBi	12 dBi	25 dBi
Beamwidth - Azimuth	50°	15°	6°
Beamwidth - Elevation	70°	64°	10°
Axial Ratio	N/A	N/A	2 dB
Polarization	Linear	Linear	RHCP
<b>Mechanical Parameters</b>			
Positioner Type	Direct Drive; Brushless DC Motor		
Velocity	250°/sec		
Acceleration	500°/sec <sup>2</sup>		
Azimuth Positioning Range	0° to 360°, continuous rotation		
Elevation Positioning Range	-9° to 89°		
Pointing Accuracy	<0.25°		
Weight	30 lbs.		
Size	13.3" Diameter x 14.5" Height		
<b>Electrical Parameters</b>			
RF Connectors	1 TX Type N; 1 RX Type N: Others Available		
Control Interface Connector	GlenAir 801 Series, 19 pin		
Control Interface	RS-422, Ethernet Optional		
Operating Voltage	28 VDC; optional 12 VDC		
Transmit Power	Up to 3W CW each band		
Power Consumption (RX/TX)	30 Watts / 60 Watts at room temperature		
<b>Environmental Parameters</b>			
Temperature - Operating	-30°C to +55°C		
Vibration	MIL-STD-810G, Figure 514.6C-3		
Radome	Yes		
<b>Options</b>			
Received Signal Strength Indicator (RSSI) Capability			

\* Specifications are subject to change.