



# Satellite Based Augmentation System Antennas

Beyond Gravity Space provides antennas for SBAS, WAAS and EGNOS applications. Low weight compact high performance antennas can be provided with dual band (e.g. E1 and E5) as well as single band capacity.

## Key features

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- Dual-band antenna (e.g.E1 and E5)
- GEO global coverage
- RHCP
- Low ohmic loss design (< 0.3 dB)
- Outstanding compact low profile design
- Low PIM design
- All metal design except for minute use of dielectrics
- Diplexer (E1 and E5) can be implemented
- The antenna design can be adapted to customer needs
- Can be used together with antenna pointing mechanisms

## Heritage

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The dual-band GNSS antenna has its heritage in Beyond Gravity extensive portfolio of Patch Excited Cup (PEC) array antennas and huge quantity of array elements.

The heritage is also valid for single band antennas.

## Technical data dual band antenna

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|-------------------------------|------------------|---------------|
| • Min gain 0°                 | E1 >20 dBi       | E5 > 18 dBi   |
| • Min gain 0° - 8.7°          | E1 >16.9 dBi     | E5 > 16.2 dBi |
| • Axial Ratio E1/E5 0° - 8.7° | <1 dB            |               |
| • Return Loss                 | >20 dB           |               |
| • RF interface                | TNC              |               |
| • Power                       | 70W (2 carriers) |               |
| • Diameter                    | 720 mm           |               |
| • Height                      | 140 mm           |               |
| • Mass                        | <10 kg           |               |

## Technical data single band antenna

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|-------------------------------|--------------------|----------|
| • Min gain 0°                 | E1 or E5 >18 dBi   |          |
| • Min gain 0° - 8.7°          | E1 or E5 >16.1 dBi |          |
| • Axial Ratio E1/E5 0° - 8.7° | <1.2 dB            |          |
| • Return Loss                 | >20 dB             |          |
| • RF interface                | TNC                |          |
| • Power                       | 70W                |          |
| • Diameter                    | E1 550 mm          | E5 760mm |
| • Height                      | E1 85 mm           | E5 100mm |
| • Mass                        | E1 <4 kg           | E5 <5 kg |