

# G5-A1 Antenna



## Full-Wave Campaign Antenna

The G5-A1 antenna has been designed to support all GNSS signals currently being broadcast or planned for the future. All modernized GPS signals, including GPS L5, are included. It also tracks all GLONASS, Galileo, BeiDou, and QZSS signals.

Built with hardened materials, the G5-A1 is the most robust economy, geodetic, campaign antenna on the market today.

- Full-wave, zero-centered geodetic reference station antenna
- Designed for highly efficient multipath reduction
- Ideal for portable geodetic market requirements
- All-in-view signal tracking

| OPERATING FREQUENCY RANGE                   |                                                                  |
|---------------------------------------------|------------------------------------------------------------------|
| Lower band                                  | 1230±70 MHz<br>(E5a, L5, E5b, G3, B2, E3, L2, G2, E4, B3, E6)    |
| Upper band                                  | 1570±40 MHz (E2, B1, L1, B1-2, E1, G1, SBAS)                     |
| OUT OF BAND REJECTION                       |                                                                  |
| Lower band<br>(1100...1380 MHz)             | -30 dBc (typical)                                                |
| Upper band<br>(1510...1660 MHz)             | -30 dBc (typical)                                                |
| f < 1000 MHz                                | -50 dBc (typical)                                                |
| f > 1800 MHz                                | -50 dBc (typical)                                                |
| GAIN, NOISE FIGURE AND VSWR                 |                                                                  |
| LNA Gain                                    | 35 dB (typical)                                                  |
| Gain at Zenith (90°)                        | Lower band: 5.5 dBic (minimum)<br>Upper band: 4.5 dBic (minimum) |
| Gain Roll-Off<br>(from Zenith to Horizon)   | Lower band: 13 dB<br>Upper band: 10 dB                           |
| Noise Figure                                | 1.0                                                              |
| VSWR                                        | ≤ 2.0 : 1                                                        |
| Differential Propagation Delay<br>(typical) | 6 ns (maximum)                                                   |
| Nominal Impedance                           | 50 Ohm                                                           |
| ENVIRONMENTAL                               |                                                                  |
| Temperature<br>(MIL-STD 810G)               | Operating: -40°C to 75°C<br>Storage: -40°C to 80°C               |
| Water/Dust Rating                           | IP67 IEC 60529                                                   |
| Drop Test                                   | 1x port up to 480 mbps<br>(High Speed)                           |
| CAN                                         | Drop with pole from 2 m onto concrete surface                    |
| RoHS Compliant                              | Yes                                                              |
| POWER                                       |                                                                  |
| Input Voltage                               | 3 to 16 VDC                                                      |
| Power Consumption                           | 65 mA (typical)                                                  |
| PHYSICAL                                    |                                                                  |
| Dimensions (d x h)                          | 298 x 75 mm (antenna)                                            |
| Weight                                      | 1.3 kg                                                           |
| Connector                                   | TNC female                                                       |

Specifications subject to change without notice.  
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