**Antennas GPS-702L**

**DUAL-FREQUENCY ANTENNA DELIVERS EXCELLENT PERFORMANCE, MULTIPATH REJECTION AND L-BAND FUNCTIONALITY**

**EXCEPTIONAL L-BAND RECEPTION**
The GPS-702L antenna allows users to take advantage of the improved positioning accuracy provided by L-Band services. Worldwide, subscription-based services offer real-time Differential GPS (DGPS) positioning with metre to decimetre-level accuracy.

**ENHANCED RTK PERFORMANCE**
The GPS-702L delivers enhanced RTK performance for high accuracy, real-time positioning applications. Closely located L1 and L2 phase centers combined with high phase center stability ensures optimal RTK operation, even over long baselines. The antenna includes the NovAtel proprietary Pinwheel® technology for excellent multipath rejection. As a result, this antenna enables the versatility to work in virtually any positioning mode.

**DURABLE, FUTURE-PROOF DESIGN**
Enclosed in a durable, waterproof housing, the GPS-702L meets MIL-STD-810F for vibration and salt spray. Sharing the same form factor as other NovAtel GPS-700 series antennas, the GPS-702L antenna is compact and lightweight, making it highly portable and suitable for a wide variety of environments and applications. The antenna meets the European Union’s directive for Restriction of Hazardous Substances (RoHS), so integrators can be confident the GPS-702L antenna can be used in system designs for years to come.

**BENEFITS**
- Single antenna solution reduces costs
- Can be used in any positioning mode
- Eliminates need for future redesign

**FEATURES**
- Receives GPS L1/L2, BeiDou B1, Galileo E1 and L-Band signals
- Access to L-Band signals
- Enhanced RTK performance
- Excellent multipath rejection
- RoHS compliant

If you require more information about our antennas, visit [www.novatel.com/antennas](http://www.novatel.com/antennas)
GPS-702L

PERFORMANCE

3 dB Pass Band
L1  1575.0 ± 20 MHz (typical)
L2  1228.0 ± 20 MHz (typical)
L-Band  1543.0 ± 20 MHz (typical)

Out-of-Band Rejection
L1, L-Band (fc=1555 MHz)
  fc±75 MHz  30 dBc (typical)
  fc±100 MHz  50 dBc (typical)
L2 (fc=1227 MHz)
  fc±50 MHz  20 dBc (typical)
  fc±100 MHz  30 dBc (typical)
  fc±100 MHz  50 dBc (typical)

LNA Gain
Gain at Zenith (90°)
  L1  +5.0 dBic (minimum)
  L2  +1.5 dBic (minimum)
L-Band  +5.0 dBic (minimum)

Gain Roll-Off (from Zenith to Horizon)
L1  13 dB
L2  12 dB
L-Band  13 dB

Noise Figure  2.5 dB (typical)
VSWR  ≤2.0 : 1
L1-L2 Differential Propagation Delay  15 ns (maximum)

Nominal Impedance  50 Ω
Altitude  9,000 m

PHYSICAL AND ELECTRICAL

Dimensions  185 mm diameter x 69 mm
Weight  500 g

Power
Input voltage  +4.5 to +18.0 VDC
Power consumption  33 mA (typical)

Connector  TNC female

ENVIRONMENTAL

Temperature
Operating  -40°C to +85°C
Storage  -55°C to +85°C

Humidity  95% non-condensing

Vibration (operating)
Random  MIL-STD-810F
Sinusoidal  ASAE 5.15.2, Level 1
Shock  IEC 68-2-27, Ea
Bump  IEC 68-2-29, Eb
Salt Spray  MIL-STD-810F, 509.4
Waterproof  IEC 60529 IPX7

Compliance  FCC, CE
RoHS  EU Directive 2011/65/EU

For the most recent details of this product: www.novatel.com/products/gnss-antennas/high-performance-gnss-antennas/gps-702l/

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1. Not including tape measure tab. Full diameter with tape measure tab is 195 mm.