Antennas GNSS-750

REVOLUTIONARY GNSS WIDEBAND ANTENNA ENHANCES ACCURACY AND PERFORMANCE

SUPPORTS GPS, GLONASS, GALILEO AND BEIDOU

The multi-constellation GNSS-750 antenna from NovAtel delivers next generation choke ring technology, ensuring functionality with existing and planned satellite constellations. The robust, low profile construction makes it ideal for reference stations, geological monitoring and other applications requiring a high performance antenna.

SUPERIOR PERFORMANCE AND ACCURACY

The innovative design of this 3D antenna improves low elevation tracking.

PROVEN ROBUST TECHNOLOGY

Utilizing an ultra-wideband Dorne-Margolin antenna element, the GNSS-750 optimizes antenna gain, enabling use with most manufacturers' geodetic receivers. The sturdy aluminum alloy construction ensures it can withstand the most difficult environmental conditions.

BENEFITS

+ High precision measurements
+ More signal observations ensure higher performance
+ Eliminates need to upgrade as future GNSS signals become available
+ Withstands harsh environments

FEATURES

+ Stable phase center
+ Ultra-wideband Dorne-Margolin element
+ Aluminum alloy construction
+ Tracks signals when visible, down to the horizon and below

If you require more information about our antennas, visit www.novatel.com/antennas

GNSS-750

PERFORMANCE

Signals Tracked

GPS	L1, L2, L2C, L5
GLONASS	L1, L2, L3
Galileo	E1, E5a, E5b, E6, AltBOC
BeiDou	B1, B2, B3
L-Band	

3 dB Pass Band

L1	1568.5 ± 55 MHz (typical)
L2	1232 ± 80 MHz (typical)

Out-of-Band Rejection

L1 (fc=1568.5 MHz)	
fc±100 MHz	30 dBc (typical)
fc±150 MHz	50 dBc (typical)
L2 (fc=1232.5 MHz)	
fc+150 MHz	30 dBc (typical)
fc-150 MHz	50 dBc (typical)
fc±100 MHz	30 dBc (typical)
Other Bands	
f<900 MHz	80 dBc (typical)
f>150 MHz	80 dBc (typical)

LNA Gain	41 ±3 dB (typical)
Gain at Zenith (90°)	
L1/E1/B1	+5.0 dBic (minimum)
L2/L5/E5	+5.0 dBic (minimum)
B2/B3/E6	+5.0 dBic (minimum)
Noise Figure	2.0 dB (typical)
VSWR	1.5 : 1
Phase Center Offset	<2 mm[1]
Altitude	IEC-68-2-13 (-400 to +10,400 m)

PHYSICAL AND ELECTRICAL

Dimensions	380 mm dia x 200 mm
Weight	7.6 kg
Power	
Input voltage	+3.3 to +12.0 VDC
Power consumption	100 mA (typical)
Nominal Impedance	50 Ω
Connector	N-type with TNC adapter supplied

ENVIRONMENTAL

Temperature	
Operating	-55° C to +85° C
Storage	-55° C to +90° C
Humidity	IEC-9022-13-06 100% non-condensing
Solar Radiation	IEC-68-2-5
Resistance to Corrosion	IEC-60950-22
Water Ingress	IEC-60529 IPX6 and IPX7
Dust Ingress	IEC-60529 IP6X
Salt Fog	IEC-68-2-11
Sinusoidal Vibration (operating)	ISO 9022-3 Method 36
Shock	MIL-STD-810F, 516.5
Compliance	FCC, CE

For the most recent details of this product:
www.novatel.com/products/gnss-antennas/fixed-reference-gnss-antennas/gnss-750/

novatel.com

sales@novatel.com

1-800-NOVATEL (U.S. and Canada)
or 403-295-4900

China 0086-21-68882300

Europe 44-1993-848-736

SE Asia and Australia 61-400-883-601

Version 6 Specifications subject to change without notice.

Printed in Canada.
D13333 November 2015

Antenna calibration data is published on the NGS website:
www.ngs.noaa.gov/ANTCAL/
and Geo++ website:
http://gnpcvdb.geopp.de/pcvdb/GNPCVDB.html