



GNSS ANTENNA

## GrAnt-G2T-JS-HPO



GrAnt-G2T-JS-HPO is a versatile, high-performance antenna. It can be mounted on flat surfaces with four screws or mounted on standard poles (5/8-11 or 1-14 inches thread). The antenna cable can be connected via the standard TNC (N-type optional) connector on its side or routed through the center of the antenna for ultimate protection in harsh environments.

J-Shield is our filter that protects GPS L1 and Galileo L1 bands. It brings in all the useful signals intact and rejects out-of-band signals with a slope of about 12 dB/MHz.

Similarly, it is our filter that protects GPS L2, GPS L5, and Galileo L5 and has a slope of about 9 dB/MHz. These filters have been extensively tested with five different innovative tests and prove that the filters also improve GNSS receivers' performance.

The JS-HPO antenna option is characterized by an increased dynamic range of input in-band signals.

The antenna can track GPS, Galileo, WAAS, EGNOS, MSAS, GAGAN, and QZSS signals. An optional ground plane can be purchased to increase multipath mitigation.

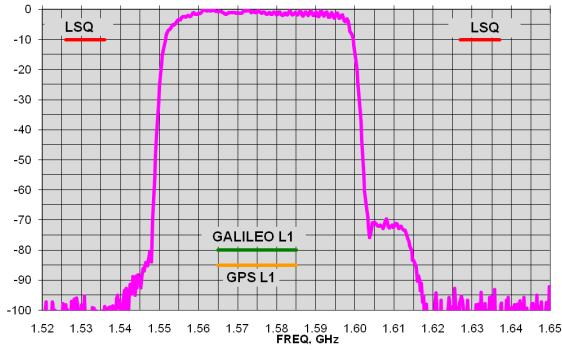
**DATA SHEET**

VERSION 1.1 APRIL 6, 2021

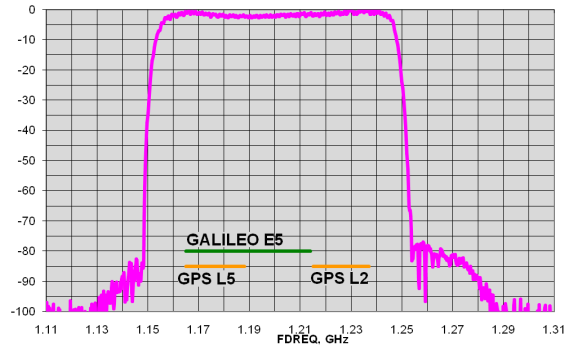
# GrAnt-G2T-JS-HPO

<b>SIGNAL</b>	
Capability	GPS L1/L2/L2C/L5, GALILEO E1 /E5ab, WAAS L1/L5, EGNOS, MSAS, GAGAN, QZSS L1/L2/L2C/L5
Frequency, MHz	1555~1595 1155~1245
<b>ELECTRICAL</b>	
Antenna Gain, dB (typ.)	5.0 (1555~1595 MHz) 4.0 (1155~1245 MHz)
Axial Ratio, dB (max.)	3.0
Output Impedance, Ohm	50
LNA gain, dB	33±3
Noise Figure, dB ( typ.)	2.8
Input Power at 1 dB gain compression, dBm (min.)	-30
DC voltage, VDC	4.5~15.0
Current, mA (max.) @ 5 V	200
Power consumption, W (max)	0.9
<b>ENVIRONMENTAL</b>	
Operating Temperature, °C	-45 ~ +85
Storage Temperature, °C	-50 ~ +85
Humidity	Waterproof, 100% non-condensing, IP68
<b>MECHANICAL</b>	
Antenna type	Microstrip
Connector	TNC; N-type (optional)
Weight, g	515
Dimensions, mm	140 x 140 x 62
Enclosure	Radome: ABS, Base: Aluminum
Color	Green
Mounting	5/8-11 or 1-14 inches mount, or 4 holes M5

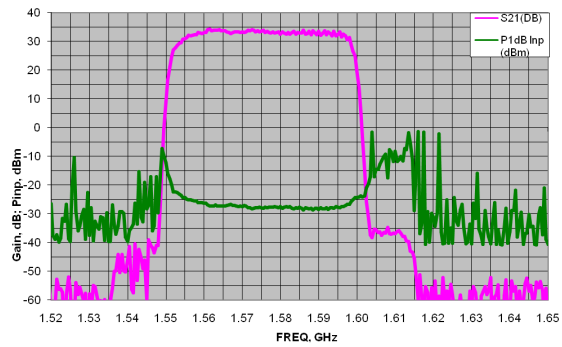
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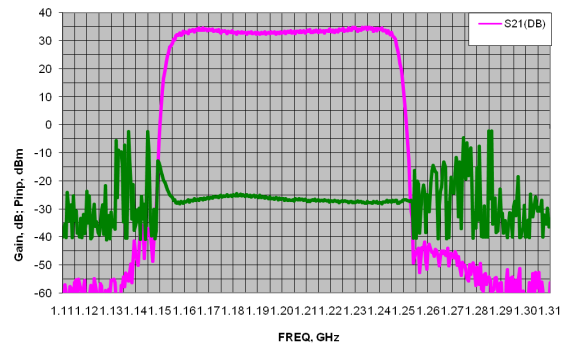
Frequency response of J-Shield filter for GPS L1, and Galileo E1 bands.



Frequency response of J-Shield filter for GPS L2, GPS L5, and Galileo E5



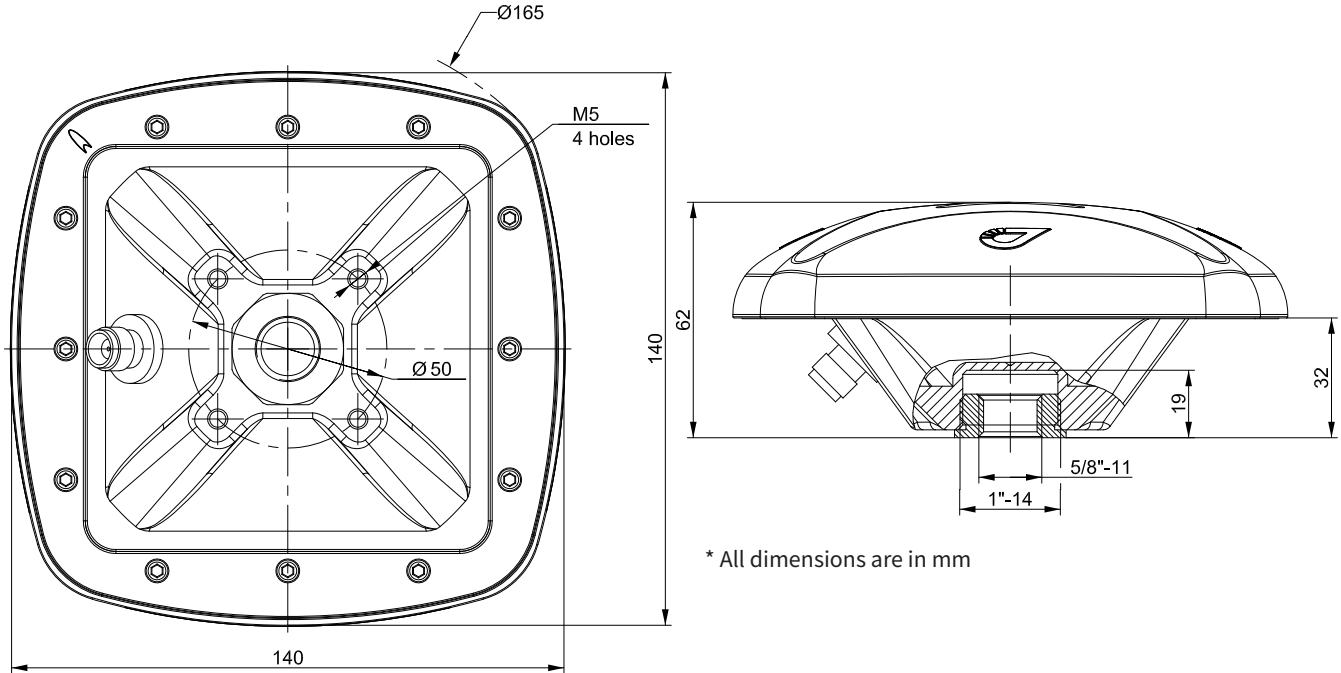
Frequency response of J-Shield filter, and P1dB input for L1.



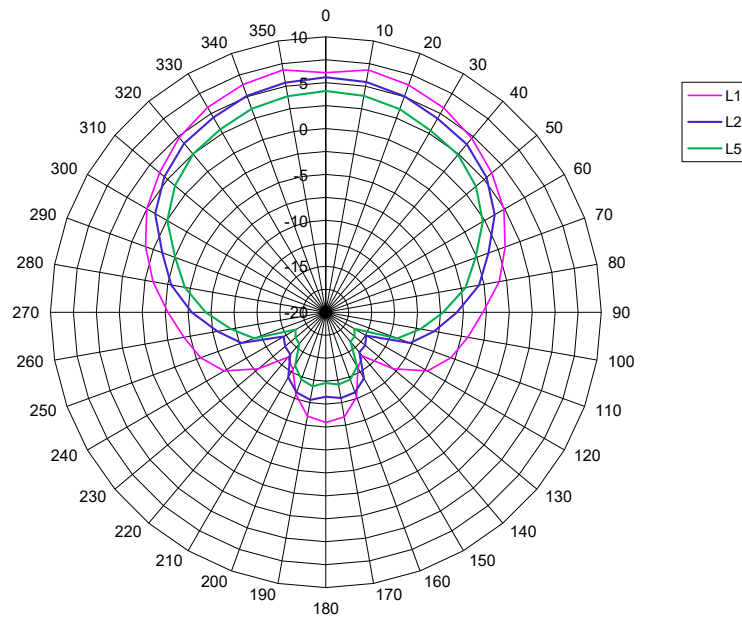
Frequency response of J-Shield filter, and P1dB input for L2/L5.

# GrAnt-G2T-JS-HPO

## Dimensions



## Radiation Pattern



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