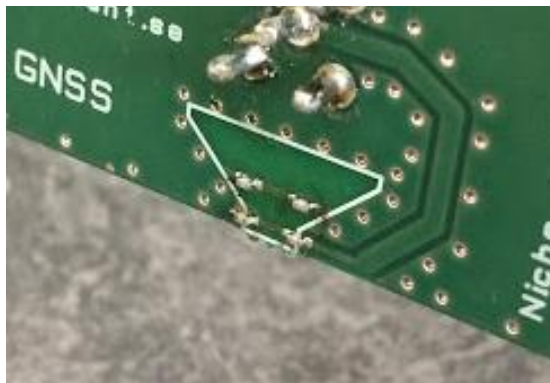


General information

This Proant patented Niche antenna, is a miniature PCB integrated antenna covering the GNSS frequencies 1559 MHz (Galileo), 1575 MHz (GPS) and 1602 MHz (Glonass). The antenna technology is licensed from, and used by permission of, Proant AB.



Technical data

Frequency	1559-1602 MHz
Return loss	< -8,2 dB (on Proant evaluation board)
Total efficiency	> -1,9 dB (65%) (on Proant evaluation board)
Gain	Max 2 dBi (on Proant evaluation board)
Dimension	6 x 12 mm
Mounting	Integrated in PCB

Application examples

Mobile accessories

Wearable devices

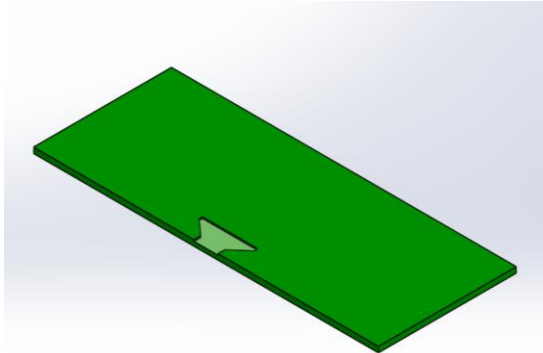
IoT devices

Alarms

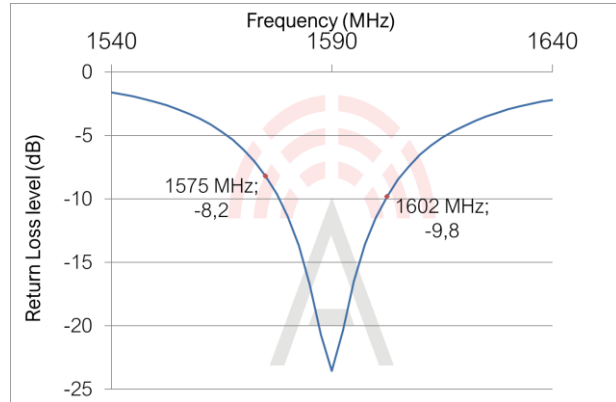
Tracking devices

Electrical performance

Measurement setup

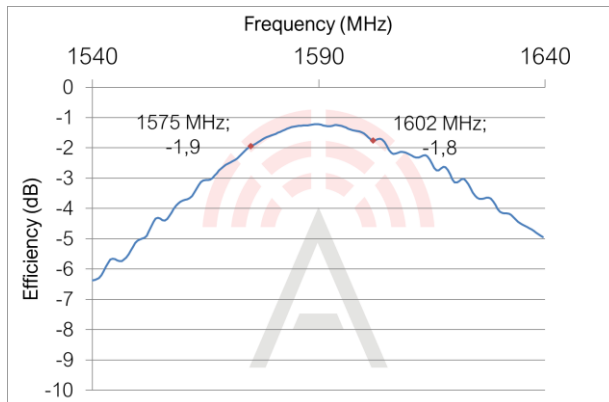


Return loss

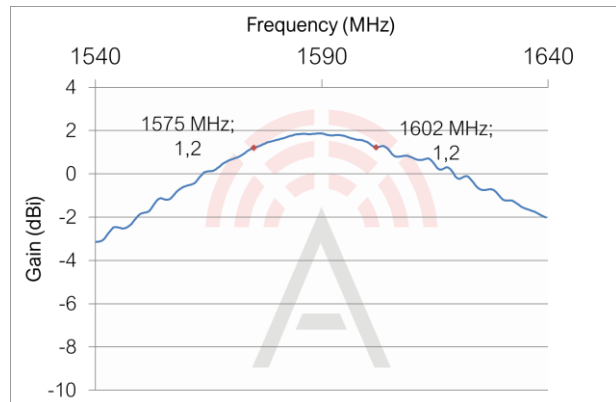


The antenna measurements were done in free space, with the antenna implemented on a 20 x 50 mm PCB.

Total radiation efficiency

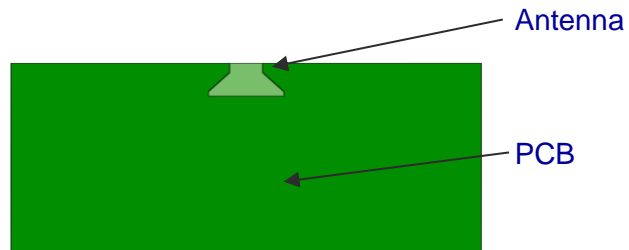
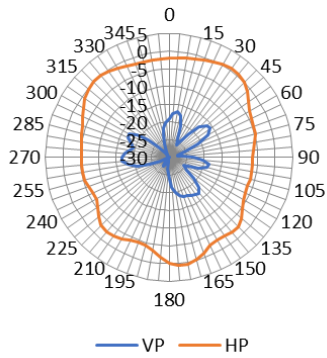


Maximum radiation gain

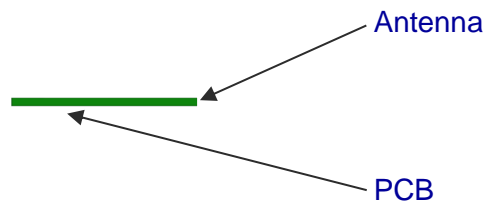
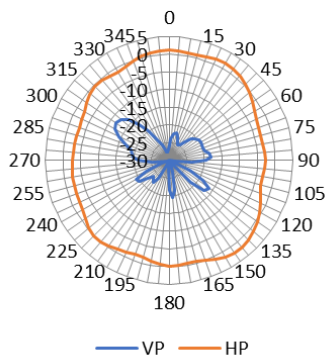


Radiation pattern, 1590 MHz

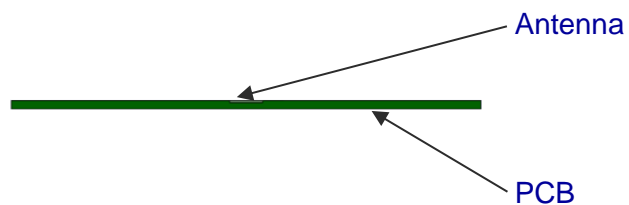
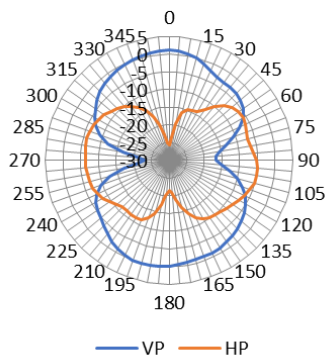
H plane



V0 plane



V90 plane



Intended applications

The antenna is optimized for operation in the GNSS bands.

GPS L1	1575.42 MHz
GLONASS L1	1602 MHz
BeiDou/COMPASS E1	1589.74 MHz
BeiDou/COMPASS E2	1561.10 MHz
Galileo E1	1575.42 MHz

Licensing information

License agreement information, terms and conditions, and design advice are provided upon request. Please send all requests to info@proant.se.

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