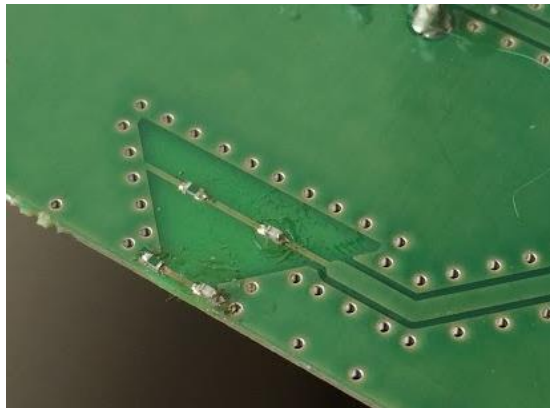

General information

This Proant patented Niche antenna, is a miniature PCB integrated antenna covering the 868 MHz and 915 MHz ISM bands (868-928 MHz). The antenna technology is licensed from, and used by permission of, Proant AB.



Technical data

Frequency	868-928 MHz
Return loss	< -6,2 dB (on Proant evaluation board)
Total efficiency	> -2,3 dB (59%) (on Proant evaluation board)
Gain	Max 3 dBi (on Proant evaluation board)
Dimensions	8 x 16 mm
Mounting	Integrated in PCB

Application examples

Mobile accessories

Wearable devices

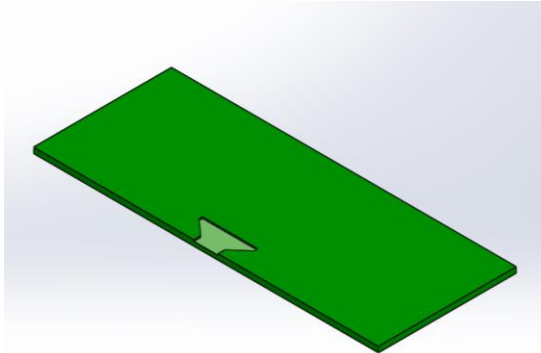
IoT devices

Alarms

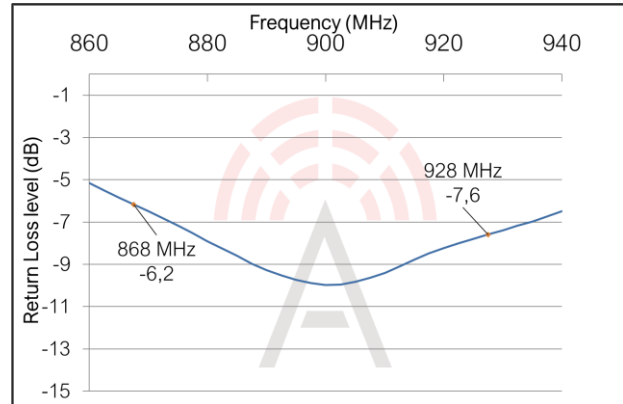
Sensors

Electrical performance

Measurement setup

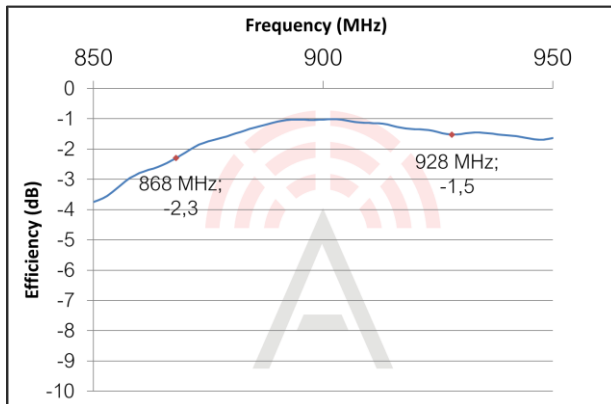


Return loss

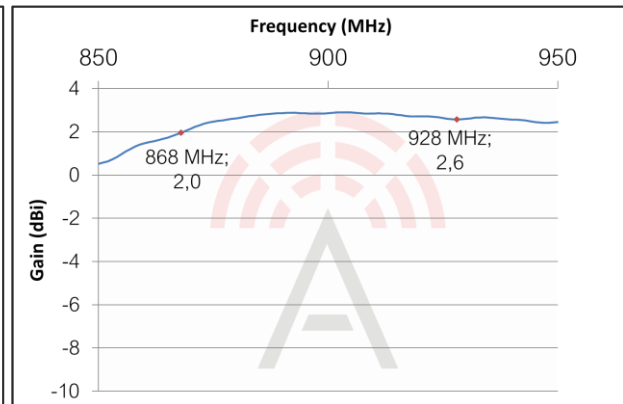


The antenna measurements were done in free space, with the antenna implemented on a 50 x 120 mm PCB.

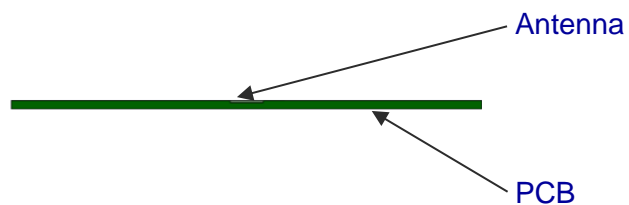
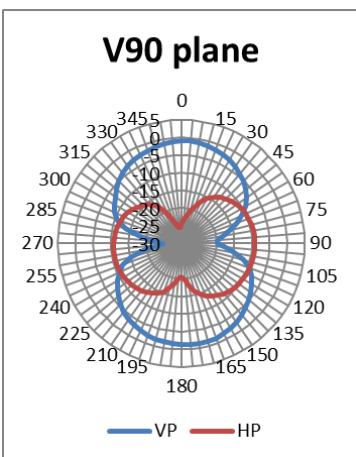
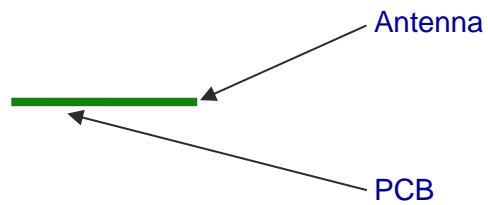
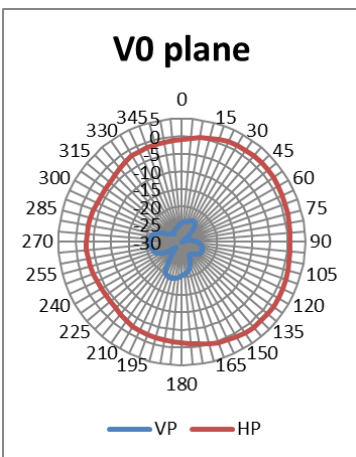
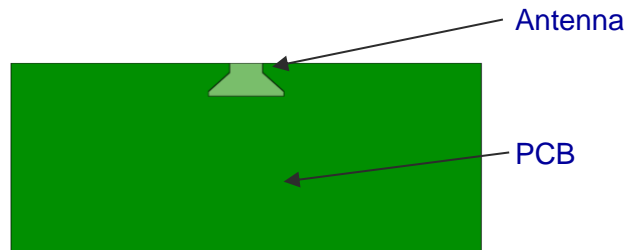
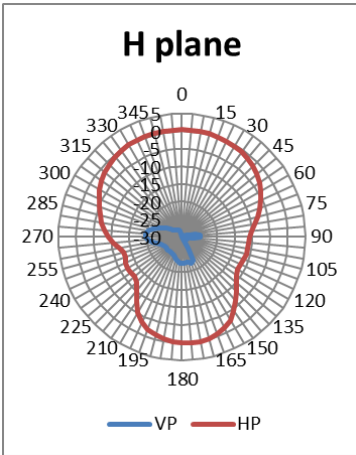
Total radiation efficiency



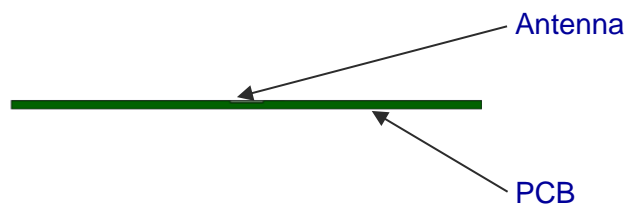
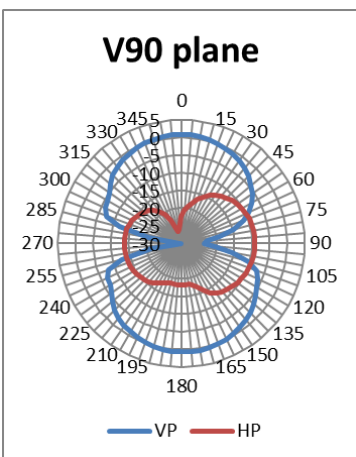
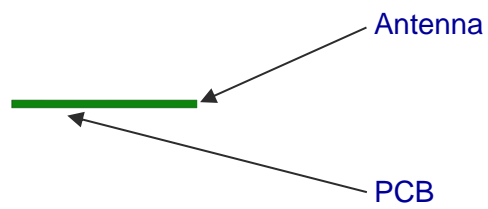
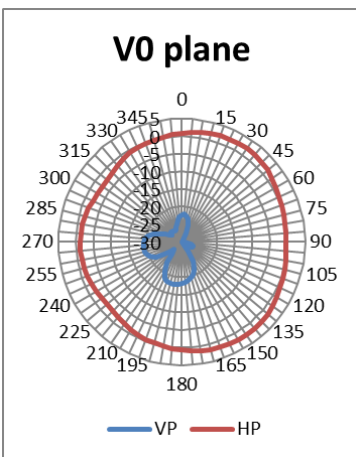
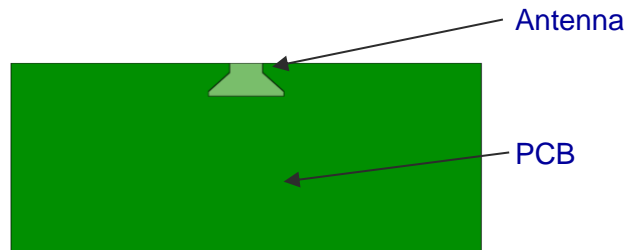
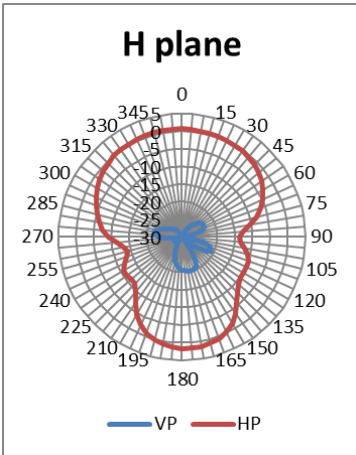
Maximum radiation gain



Radiation pattern, 868 MHz



Radiation pattern, 915 MHz



Intended applications

The antenna is optimized for operation in the ISM 868 MHz and 915 MHz bands.

ZigBee	IEEE 802.15.4	868.0-868.6 MHz/ 902-928 MHz
Z-Wave		868 MHz/ 900-921 MHz
EnOcean	ISO/IEC 14543-3-10	868 MHz/ 902-928 MHz
Sigfox		868 MHz
Wireless M-Bus	EN 13757-4:2013 mode S	868.0-868.6 MHz
	EN 13757-4:2013 mode T	868.0-869.2 MHz
	EN 13757-4:2013 mode R2	868.0-868.6 MHz
	EN 13757-4:2013 mode C	868.7-869.65 MHz

Licensing information

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

Disclaimer

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