QRH11

Quad Ridged Horn Antenna | 730 MHz – 11 GHz







The QRHII is a broadband horn antenna covering 0.73 GHz to 11 GHz, ideal for EMC testing, wireless development, and wideband measurements. It features an integrated spirit level for quick and precise alignment. Each unit is individually calibrated in our anechoic chamber, with calibration data available electronically on our website.

KEY FEATURES AND TECHNOLOGIES







Suitable for EMC/EMI

Circular polarization (optional)

QR code to access Antenna Portal

ELECTRICAL SPECIFICATIONS

| Frequency Range | 730 MHz - 11 GHz | A |
|-----------------|------------------|---|
| VSWR (avg) | 1.4 | F |
| VSWR (max) | 2.4 | F |
| Impedance | 50 Ohm | |
| Connector | SMA (female) | F |
| Gain | 3 - 15.5 dBi | |

| Antenna Factor | 23 - 38 dB/m | |
|--------------------|-------------------------------------|--|
| Power (CW/Peak) | 100 W / 170 W | |
| Port Isolation | 32 dB | |
| Cross Polarization | 25 dB | |
| Polarization | Dual Linear, Circular (with hybrid) | |

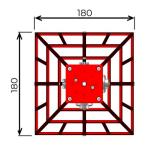
PHYSICAL SPECIFICATIONS

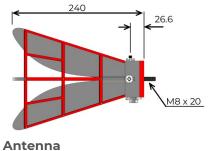
| Width | 180 mm (7.087 in) |
|--------|--------------------|
| Depth | 180 mm (7.087 in) |
| Height | 240 mm (9.449 in) |
| Weight | 1.03 kg (2.271 lb) |

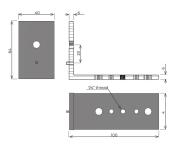
OPERATING CONDITIONS

| Rated Temperature | 0 °C to 50 °C |
|---------------------|-----------------|
| Storage Temperature | -20 °C to 70 °C |

MECHANICAL DRAWINGS



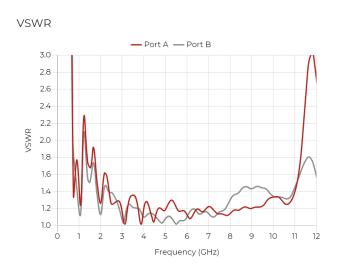


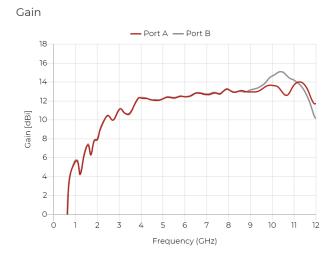


Flange

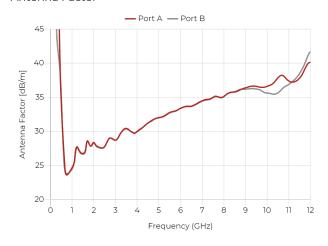
PARAMETERS AND PERFORMANCE

TYPICAL PARAMETERS

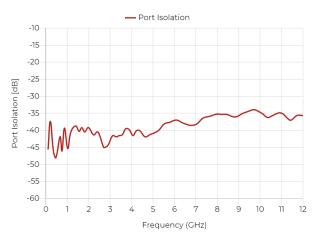




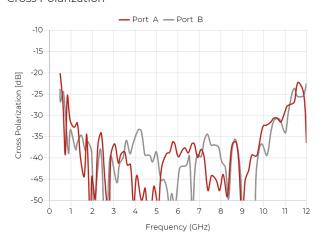
Antenna Factor



Port Isolation

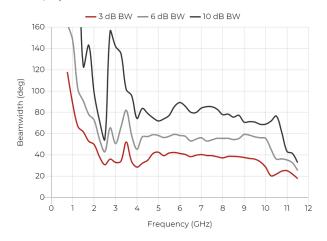


Cross Polarization

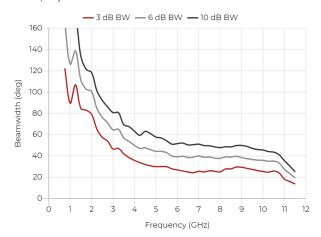


BEAMWIDTH

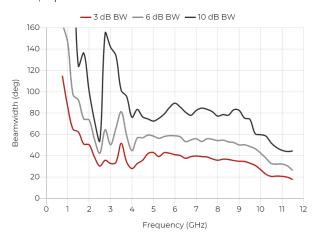
Port A, E plane



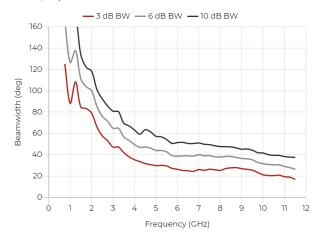
Port A, H plane



Port B, E plane



Port B, H plane



PACKAGING AND ACCESSORIES

Package Contents

- · QRH11 Antenna
- Antenna specific mount adapter with ¼ inch inner thread
- · Factory calibration certificate
- Full calibration report of each antenna
- · QR code accessing online portal
- Calibration test dataset (available online)

Custom Services

- · Custom mounting solutions
- · Custom calibration data
- · Radome waterproof enclosure

Optional Accessories

- · AHS22-10 Antenna Fixture
- · PAS02 Antenna Stand

RF SPIN MANUFACTURING EXCELLENCE

At RF SPIN, we maintain complete control over the entire antenna lifecycle through our modern facility in Nová Paka, equipped with state-of-the-art machinery. From initial design concepts and development to precision manufacturing and final testing, everything is handled inhouse by our experienced team.

This complete vertical integration allows us to maintain the highest quality standards at every stage, ensuring exceptional precision and performance that consistently outperforms competitors. Our comprehensive approach eliminates external dependencies and enables rapid innovation with superior product reliability.



Surface Treatment

Our in-house passivation baths create protective layers ensuring optimal corrosion resistance and electrical conductivity. Anodizing technology increases durability in harsh conditions while enabling customized coloring for client branding.

In-house Antenna Measurements

Our antenna measurement facility features two modern anechoic chambers equipped with both far-field and near-field measurement capabilities. The system operates across an impressive frequency range of 0.7 GHz - 120 Ghz (FF) and 2 GHz - 50 GHz (NF).



Antenna Portal

Access all critical antenna data instantly through a simple QR code scan. This digital passport eliminates paperwork, providing immediate access to specifications, documentation, and integration-ready data.

Complete Antenna Data Just One Scan Away



www.rfspin.com/antenna-portal

ABOUT RF SPIN

Experts in Precision Measurement

Antennas

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Industry Leaders Trust Our Technology

Our customers include major global companies such as Airbus Defence and Space, Apple, SpaceX, Mercedes-Benz, NASA, and prestigious international universities. We develop, design, and manufacture our antennas using innovative technologies and state-of-the-art machining equipment at our production facility in Nová Paka.







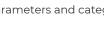




ADDITIONAL RESOURCES

Online Catalog

Browse our entire product range online with comprehensive parameters and category filtering.





www.rfspin.com/ catalog

PDF Portfolio Guide

Download our product guide in preferred print format for quick product comparison and overview.



www.rfspin.com/ portfolioguide

DOCUMENT INFORMATION

Complete product information available at https://www.rfspin.com/product/qrh11 Datasheet revision: 07-2025 Data and specifications subject to change. © RFspin 2025 - All rights reserved

MANUFACTURER

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