



Quad Ridged Horn Antenna

Specially developed for EMC/EMI testing. This dual-polarized antenna operates from 0.73 GHz up to 11 GHz and with a proper 90deg hybrid coupler can obtain circular polarization (LHCP or RHCP). Thanks to radome this antenna is suitable for outside applications. It is equipped with the standard L-shape holder, hermetically sealing, and a Gore air vent.

Features and Specifications

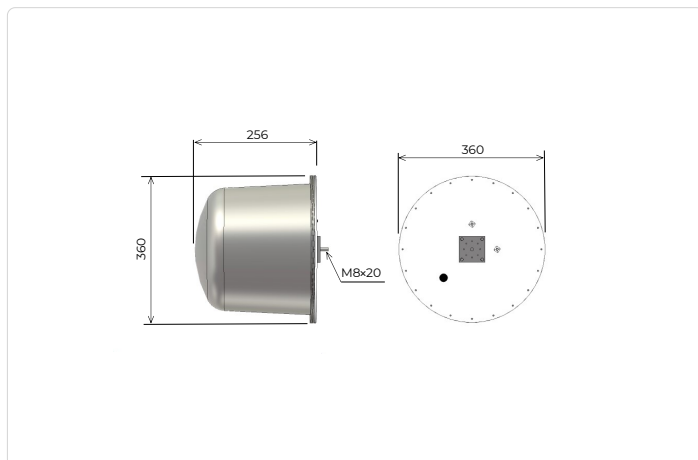
<p>Technical Performance</p> <ul style="list-style-type: none"> Wide bandwidth Low return loss Individual calibration Suitable for EMC/EMI applications 	<p>Design and Surface Treatment</p> <ul style="list-style-type: none"> Corrosion-resistant coating Includes standard mount 	<p>Manufacturing Technology</p> <ul style="list-style-type: none"> Manufactured using a high grade aluminum alloy High quality SMA type coaxial connector 	<p>Product Packaging Includes</p> <ul style="list-style-type: none"> Antenna Adapter with 1/4 inch inner thread, supplied with antenna
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Product Parameters

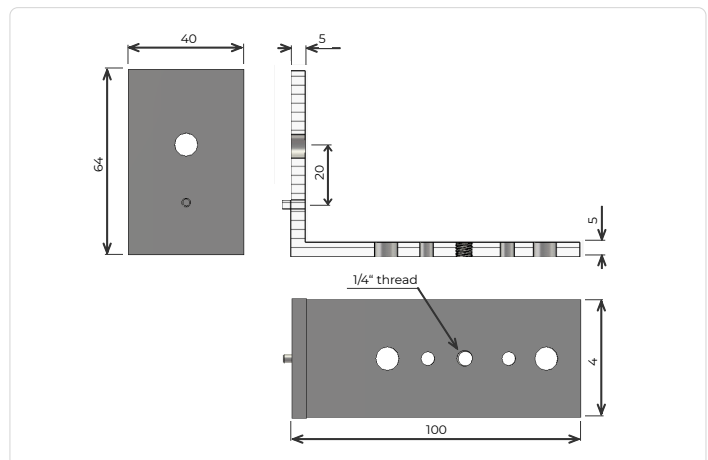
<p>PRODUCT IDENTIFICATION</p> <p>Product Name: QRH11R</p> <p>Product Category: Quad Ridged Horn Antenna</p>		<p>PHYSICAL SPECIFICATIONS</p> <p>Width: 360 mm (14.173 in)</p> <p>Height: 270 mm (10.630 in)</p> <p>Depth: 360 mm (14.173 in)</p> <p>Weight: 2.7 kg (5.952 lb)</p>	
<p>ELECTRICAL SPECIFICATIONS</p> <p>Frequency Range: 730 MHz – 11 GHz</p> <p>VSWR (max.): 2.4</p> <p>VSWR (avg.): 1.5</p> <p>Impedance: 50 Ohm</p> <p>Connector: SMA (female)</p> <p>Power (CW / Peak): 100 W / 170 W</p> <p>Antenna Factor: 23 – 38 dB/m</p> <p>Port Isolation: -32 dB</p> <p>Polarization: Dual Linear, Circular (with hybrid)</p>		<p>OPERATING CONDITIONS</p> <p>Rated Temperature Range: -10°C – +50°C</p> <p>Storage Temperature Range: -20°C – +70°C</p>	
		<p>MOUNTING FLANGE</p> <p>Mounting: Adapter with 1/4 inch inner thread, supplied with antenna</p>	

Mechanical Drawings

Antenna



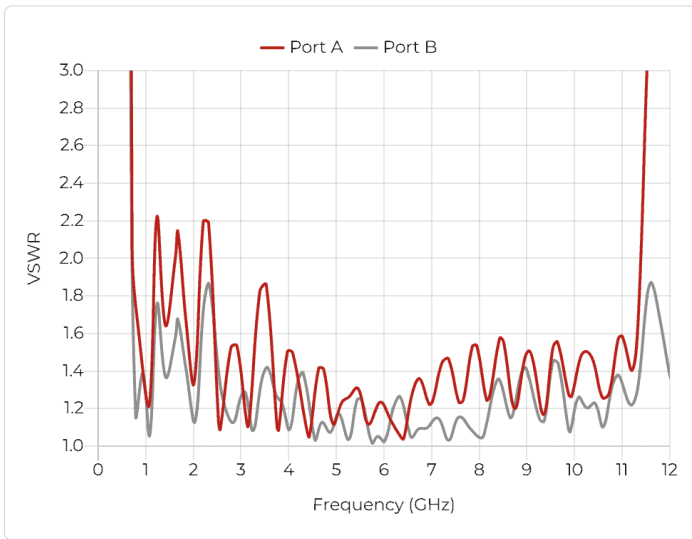
Mounting flange



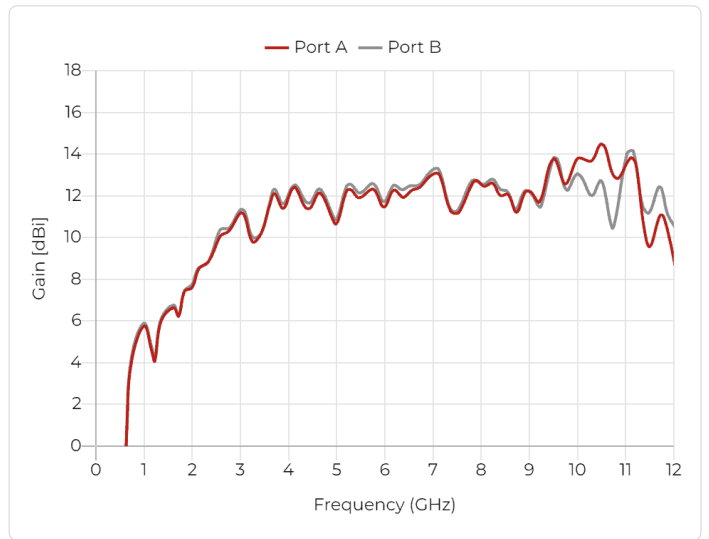
Parameters and Performance

Typical parameters

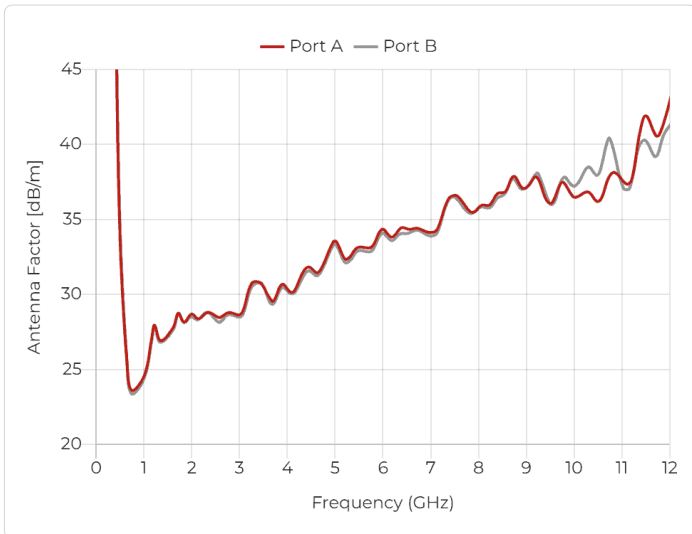
VSWR



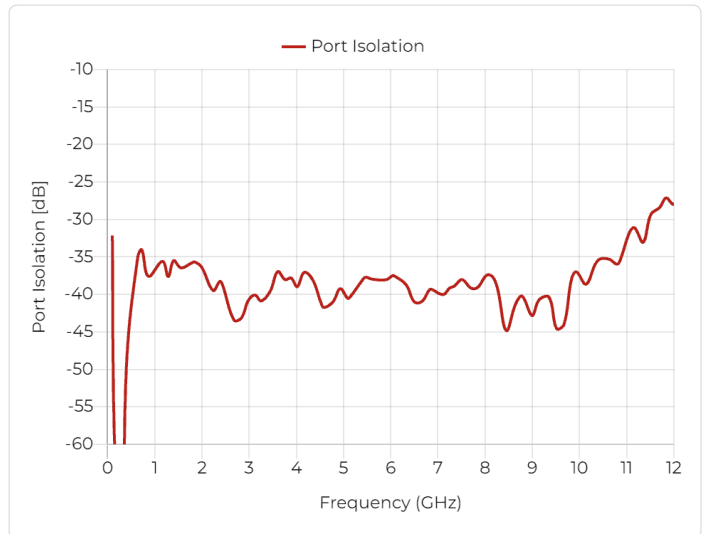
Gain



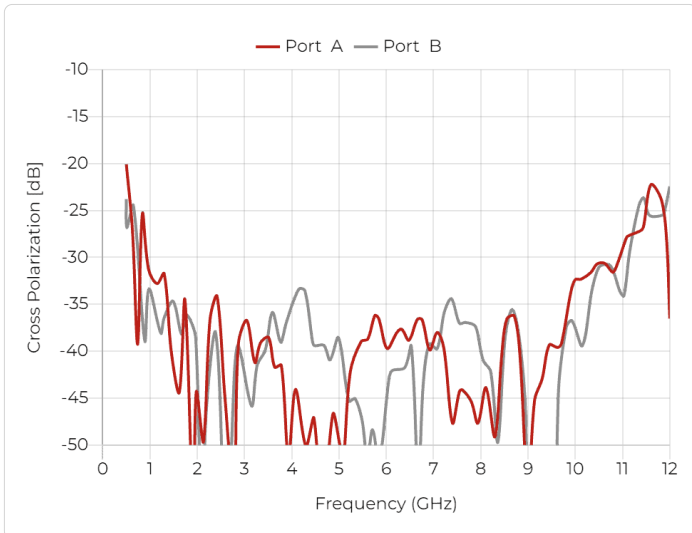
Antenna Factor



Port Isolation

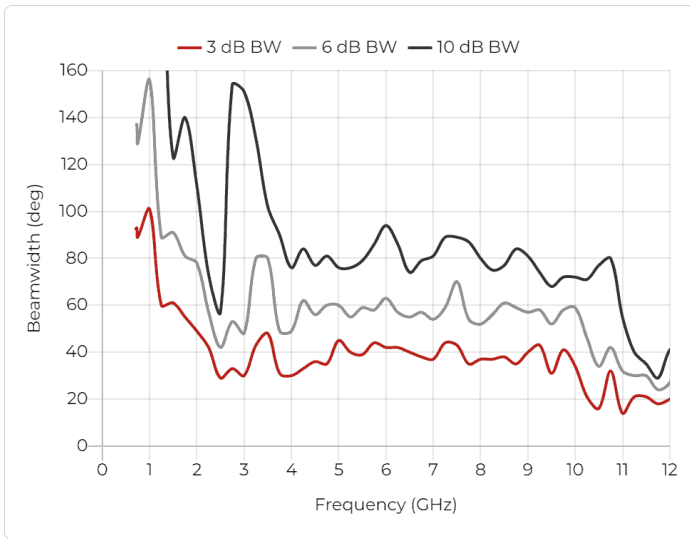


Cross Polarization

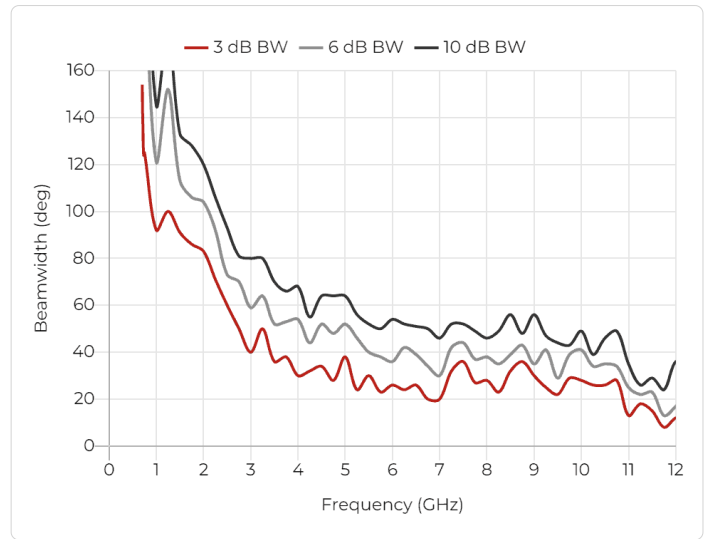


Beamwidth

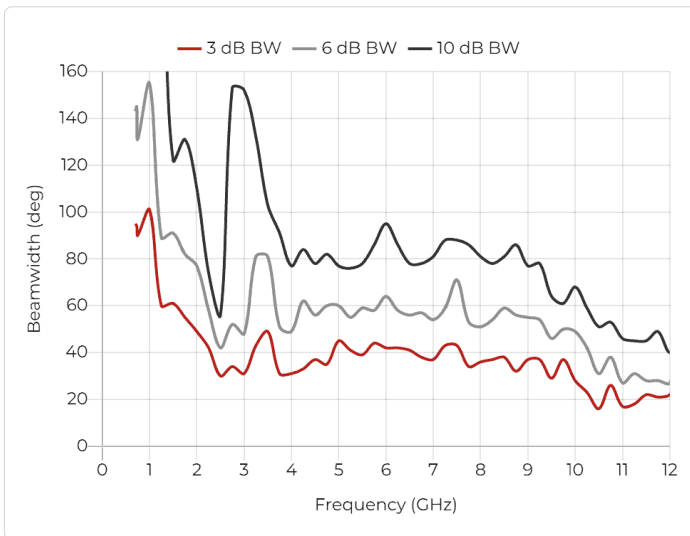
Port A, E plane



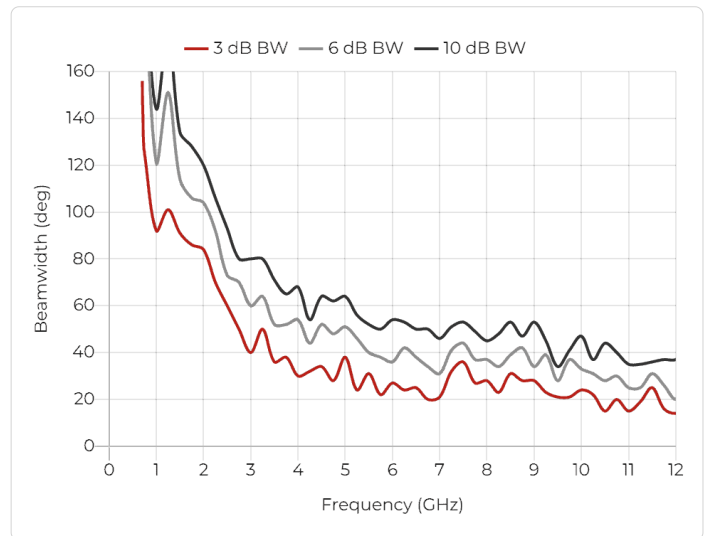
Port A, H plane



Port B, E plane

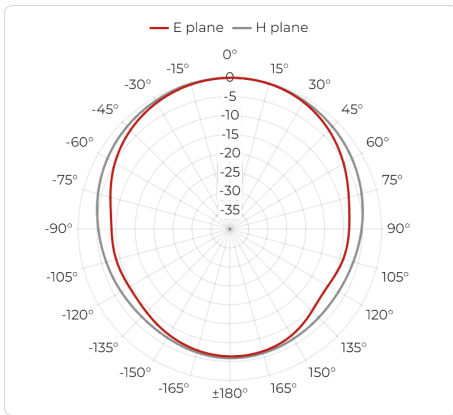


Port B, H plane

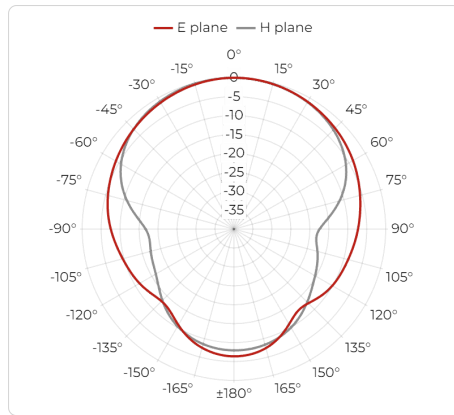


Radiation Patterns - Port A

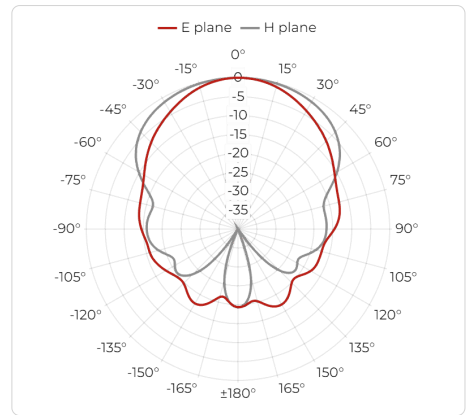
Port A, 0.75 GHz



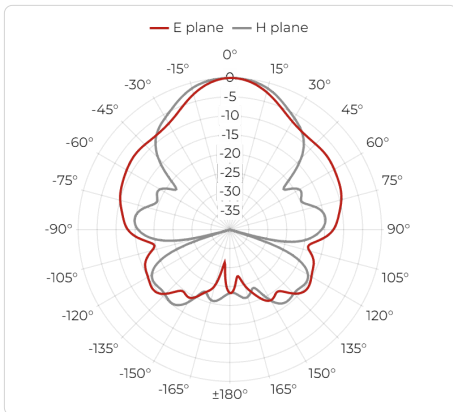
Port A, 1 GHz



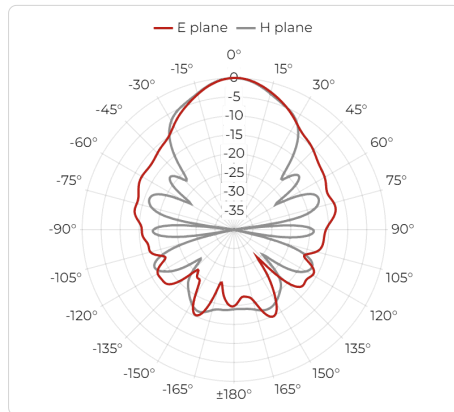
Port A, 2 GHz



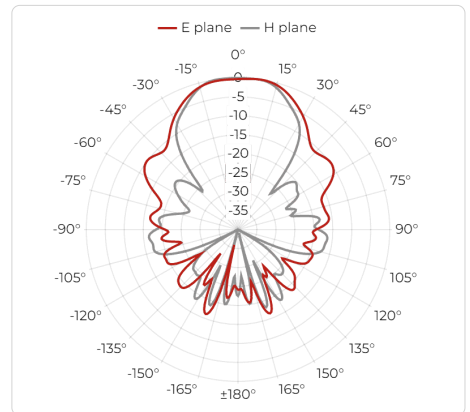
Port A, 3 GHz



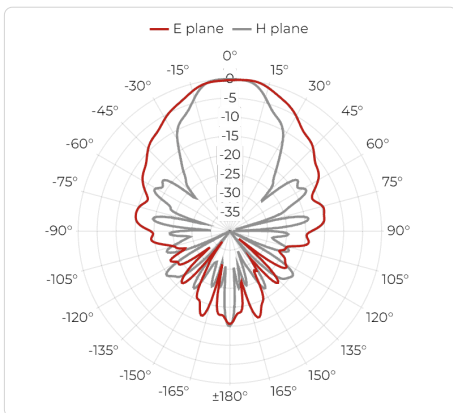
Port A, 4 GHz



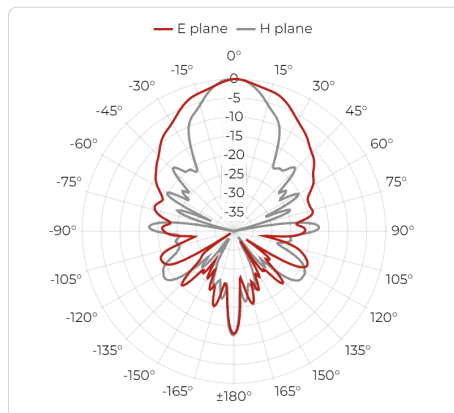
Port A, 5 GHz



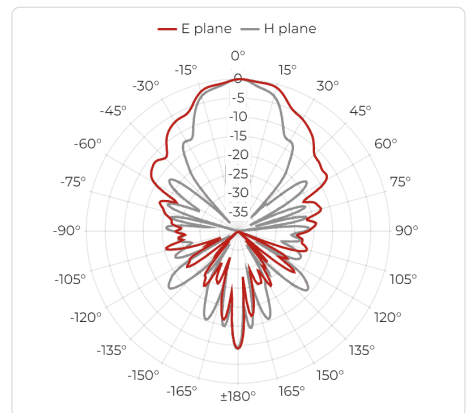
Port A, 6 GHz



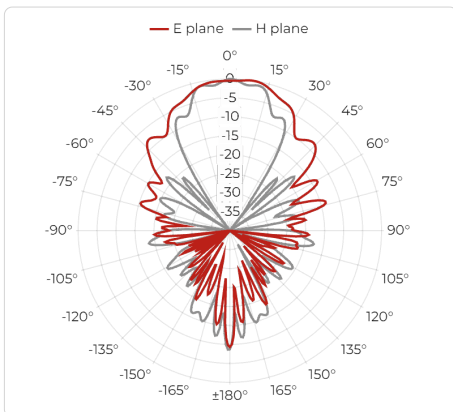
Port A, 7 GHz



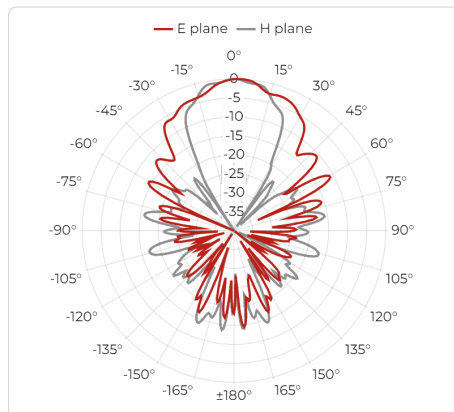
Port A, 8 GHz



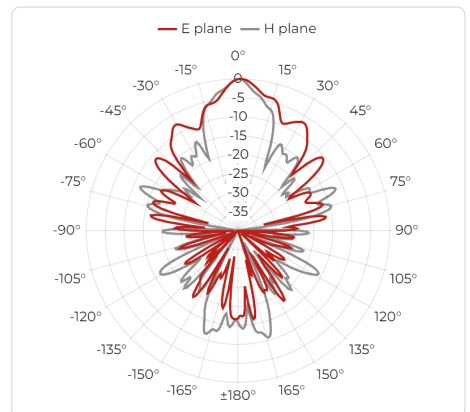
Port A, 9 GHz



Port A, 10 GHz

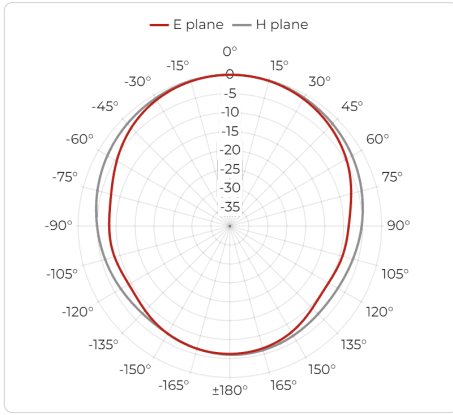


Port A, 11 GHz

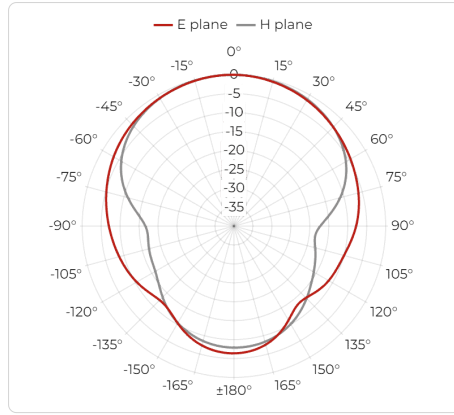


Radiation Patterns - Port B

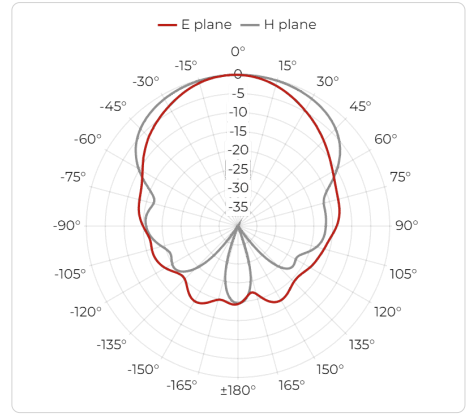
Port B, 0.75 GHz



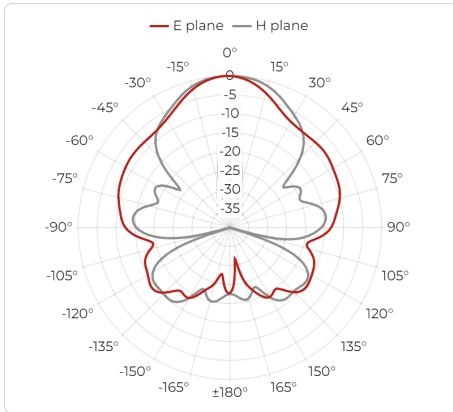
Port B, 1 GHz



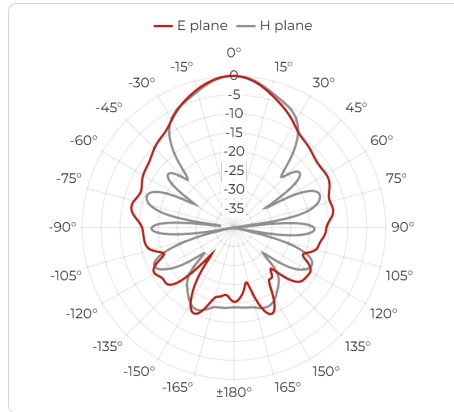
Port B, 2 GHz



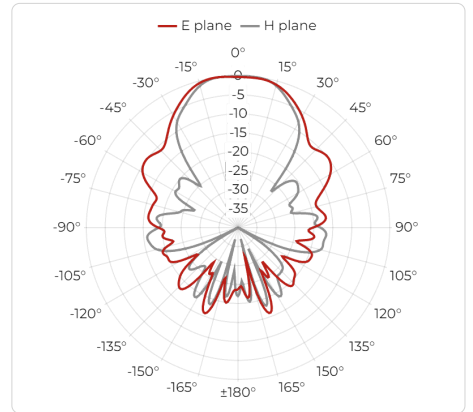
Port B, 3 GHz



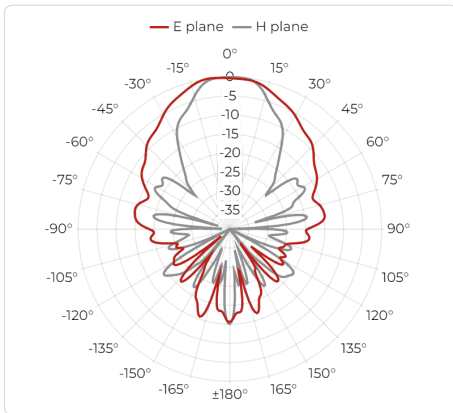
Port B, 4 GHz



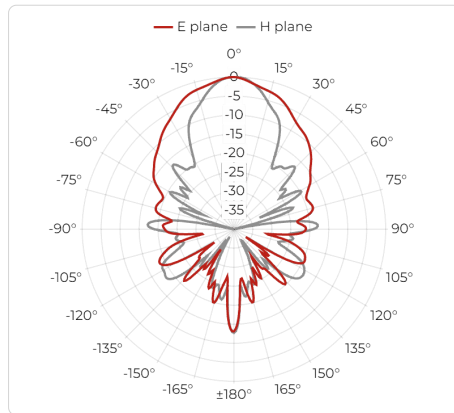
Port B, 5 GHz



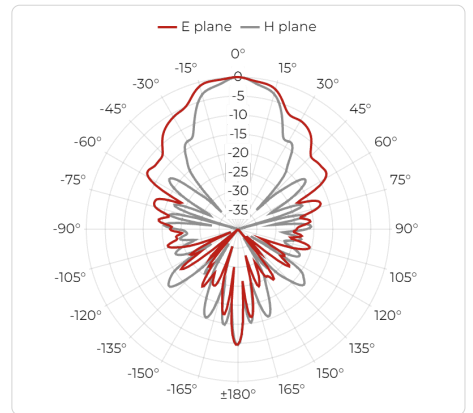
Port B, 6 GHz



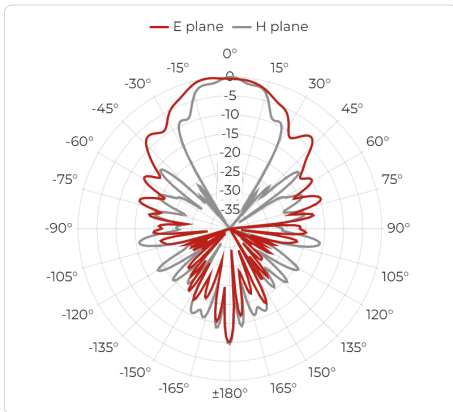
Port B, 7 GHz



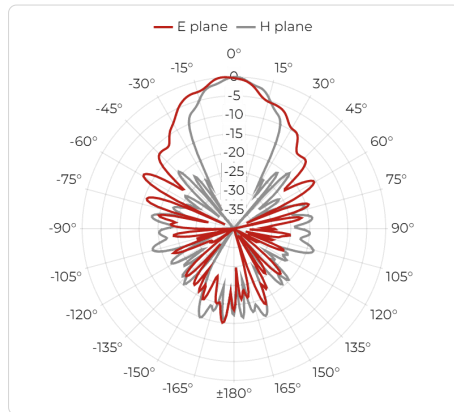
Port B, 8 GHz



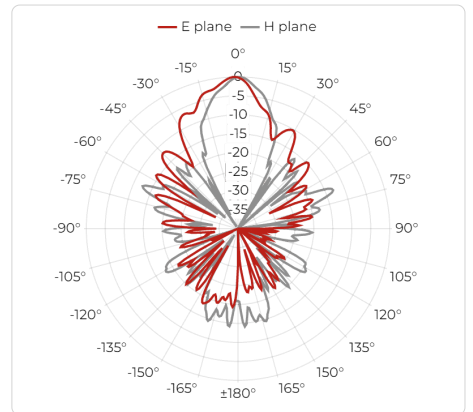
Port B, 9 GHz



Port B, 10 GHz



Port B, 11 GHz



Packaging and Accessories

What's in a box

- QRH11R Antenna
- Antenna specific mount adapter with $\frac{1}{4}$ inch inner thread
- Factory calibration certificate
- Full calibration report of each antenna
- QR code accessing online portal
- Calibration test dataset (available online)



Factory calibration report

Optional Accessories

- AHS22-10 Antenna Fixture
- PAS02 Antenna Stand

Custom services

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

Accessories

- Standard mounting flange

Manufacturer Information

About Datasheet

Product information available also online at
<https://www.rfspin.com/product/qrh11r/>

Data and specifications subject to change without notice.

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