

OEQWG1831AA

Special Purpose Antenna | 17.8 GHz – 31 GHz



The OEQWG1831AA is a dual-polarized open-ended rectangular waveguide probe operating from 17.8 to 31 GHz. Based on standard waveguide design, it enables accurate near-field measurements with predictable radiation patterns. It features two integrated coaxial connectors and can be supplied with an absorber.

ELECTRICAL SPECIFICATIONS

Frequency Range	17.8 GHz - 31 GHz	Gain	5.5 - 9.5 dBi
VSWR (avg)	1.5	Antenna Factor	49 - 52 dB/m
VSWR (max)	2	Power (CW/Peak)	25 W / 50 W
Impedance	50 Ohm	Port Isolation	30 dB
Connector	K (female)	Polarization	Dual Linear

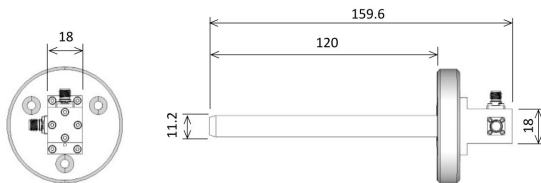
PHYSICAL SPECIFICATIONS

Width	60 mm (2.362 in)
Depth	160 mm (6.299 in)
Height	60 mm (2.362 in)
Weight	0.130 kg (0.287 lb)

OPERATING CONDITIONS

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

MECHANICAL DRAWINGS



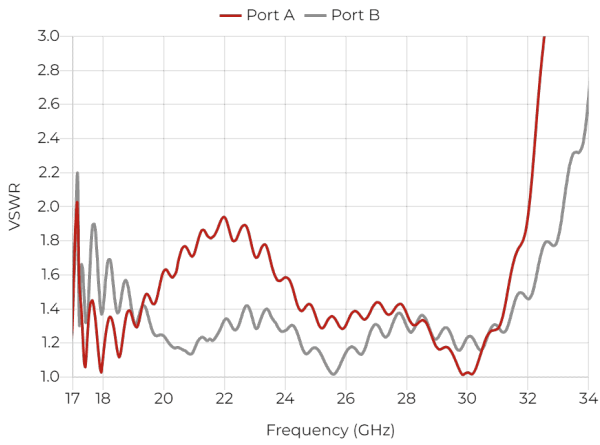
Antenna

Flange

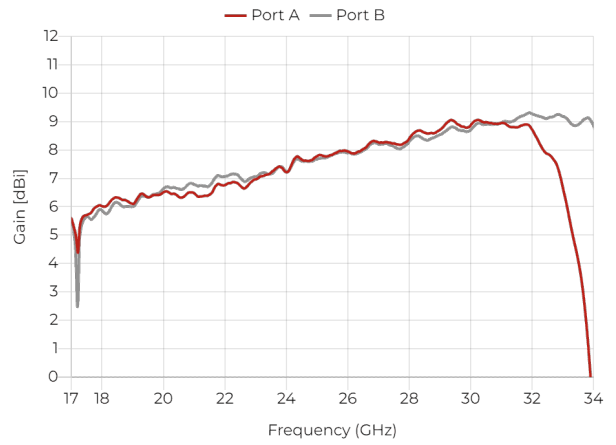
PARAMETERS AND PERFORMANCE

TYPICAL PARAMETERS

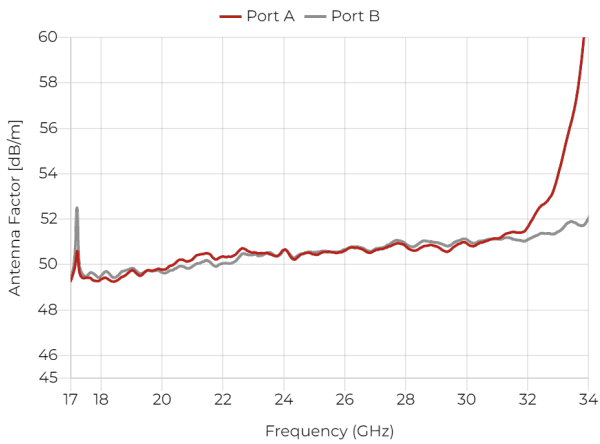
VSWR



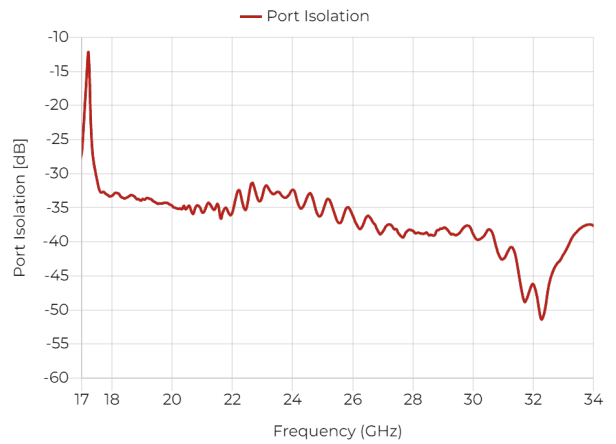
Gain



Antenna Factor



Port Isolation



PACKAGING AND ACCESSORIES

Package Contents

- OEQWG1831AA Antenna
- Factory calibration certificate
- Full calibration report of each antenna
- QR code accessing online portal
- Calibration test dataset (available online)
- Universal antenna mount

Custom Services

- Custom mounting solutions
- Custom calibration data

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 in-house 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

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 in-house by our experienced team.



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](http://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](http://www.rfspin.com/portfolioguide)

DOCUMENT INFORMATION

Complete product information available at <https://www.rfspin.com/product/oeqwg1831aa>
 Datasheet revision: 07-2025
 Data and specifications subject to change.
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MANUFACTURER

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