



## Special Purpose Antenna

Open-ended rectangular waveguides are commonly used as near-field probes in planar near-field and cylindrical near-field antenna measurements. The probe design is based upon standard rectangular waveguides and consequently, the probes can be manufactured for any standard frequency band. The radiation characteristics of OEWG can be well predicted by analytical formulas that facilitate a simplified probe pattern correction.

OEWG is equipped with an integrated coaxial connector, absorber shield, and mechanical interface with a standardized mounting flange. The OEWG1831AA is operating on frequencies from 17.7 GHz up to 31 GHz.

### Features and Specifications



#### Technical Performance

- Wide bandwidth
- Low return loss
- Individual calibration



#### Design and Surface Treatment

- Corrosion-resistant coating
- Includes standard mount



#### Manufacturing Technology

- Manufactured using a high grade aluminum alloy
- Extremely durable
- High quality K type coaxial connector



#### Product Packaging Includes

- Linear polarized open-ended waveguide antenna

### Product Parameters

#### PRODUCT IDENTIFICATION

Product Name	<b>OEWG1831AA</b>
Product Category	<b>Special Purpose Antenna</b>

#### ELECTRICAL SPECIFICATIONS

Frequency Range	<b>17.7 GHz – 31 GHz</b>
VSWR (max.)	<b>2</b>
VSWR (avg.)	<b>1.5</b>
Impedance	<b>50 Ohm</b>
Connector	<b>K</b>
Power (CW / Peak)	<b>25 W / 50 W</b>
Antenna Factor	<b>49 – 52 dB/m</b>
Polarization	<b>Linear</b>

#### PHYSICAL SPECIFICATIONS

Width	<b>390 mm (15.354 in)</b>
Height	<b>170 mm (6.693 in)</b>
Depth	<b>170 mm (6.693 in)</b>
Weight	<b>1.58 kg (3.483 lb)</b>

#### OPERATING CONDITIONS

Rated Temperature Range	<b>0°C – +50°C</b>
Storage Temperature Range	<b>-20°C – +70°C</b>

#### MOUNTING FLANGE

Mounting	<b>Universal antenna mount</b>
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## Packaging and Accessories

### What's in a box

- OEWG1831AA Antenna
- Factory calibration certificate
- Full calibration report of each antenna
- QR code accessing online portal
- Calibration test dataset (available online)
- Universal antenna mount



Factory calibration report

### Custom services

- Custom mounting solutions
- Custom calibration data

### Accessories

- Standard mounting flange

## Manufacturer Information

### About Datasheet

Product information available also online at  
<https://www.rfspin.com/product/oewg1831aa/>

*Data and specifications subject to change without notice.*

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