

# Rosenberger

## Point-to-Point Backhaul Antenna Solutions







Rosenberger headquarters, Bavaria, Germany

## Introduction

With market-leading experience, and a truly global distribution network, Rosenberg can provide backhaul antenna solutions from 0.3M to 1.8M, to help you meet the demands of your customer today and in the future.

Rosenberger offers the highest quality products which meet the most stringent of international regulatory standards, thanks to our best in class R&D function, testing facilities and the alignment of our supply chain to ensure product developments and customer support can be effectively delivered.





The Microwave/Millimetre wave antenna is an important component of the wireless backhaul system, providing point-to-point communication, and it directly affects CAPEX/OPEX, revenue and customer satisfaction.

# Reflector Antenna Solution (Standard Microwave Frequency and E-band)

Rosenberger offers cost effective and compliant MW/MM wave reflector antennas in all sizes from 0.3M to 1.8M in licensed bands from 6 GHz to 86 GHz. The 0.3M and 0.6M 80GHz reflector antennas provide E-band solutions for both current and future backhaul networks.



0.3M Antenna



0.6M Antenna



0.9M Antenna

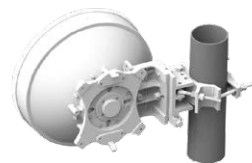
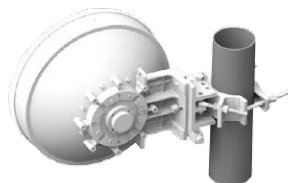


1.2M Antenna

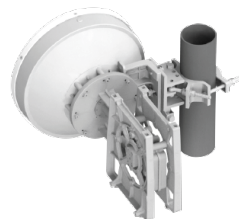


1.8M Antenna

Single  
Polarized  
Antenna



Dual  
Polarized  
Antenna



Non-Integrated Antenna

Integrated Antenna

All possible polarisation (single/dual) and ODU mounting configurations (integrated/ non-integrated) are offered by Rosenberger.

In-house reflector (0.3M to 1.8M) manufacturing capability and local sourcing of parts ensures we have a greater ability to react quickly to sudden surges in demand and avoid delays in product delivery to the customer.

The antennas are designed and validated in compliance of international standards, defined by ETSI, FCC and other global regulatory bodies.

# E-band Flat Panel Array Antenna

The E-band Flat Panel Array Antenna is an innovative new design that seamlessly merges in to the environment, reducing visual impact to a minimum. It also reduces the total cost of deployment while providing excellent RF performance.

The E-band Flat Panel Array Antenna is an innovative, low-profile and compact antenna design for backhaul networks. This antenna allows you to manage your spectrum in the 71.0-86.0GHz frequency range, as an alternative to the microwave frequency bands where capacity availability is an important requirement.

We believe that our 38 dBi E-band FPA is one of the smallest E-band antennas on the market which meets the stringent requirements of ETSI Class 3 with good Return Loss and XPD performance.

## 38 dBi FPA Key Features

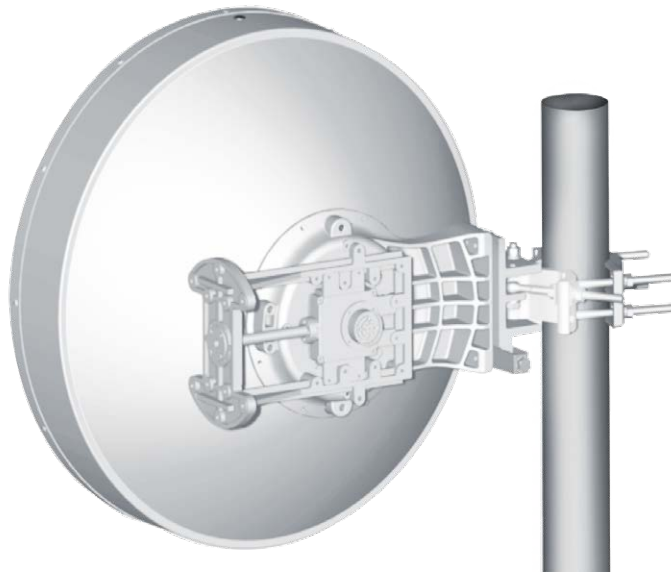


- Low-profile and compact design
- Compliance to ETSI Range 7 Class 3 and proposed FCC Cat A regulatory specifications
- Frequency: 71-76GHz & 81-86GHz
- Return Loss: Minimum 14dB
- Gain (lower band): 38.0/38.2/38.4dBi
- Gain (upper band): 38.8/39.0/39.2dBi
- Front-to-back ratio (F/B): 56dB
- XPD : Minimum 25dB

# Dual Band Antenna

Rosenberger's innovative Dual Band Antenna ( E band plus conventional MW band) ensures a strong, stable wireless connection for higher capacity and better availability.

- Enables end users to keep up with increasing capacity demands
- Allows for optimal utilisation of available spectrum
- Reduces installation costs
- A combination of a high and low frequency band leverages the advantages of both bands – supporting higher capacities and broader availability over greater distances
- Use of Dual band antenna can reduce total cost of ownership and result in CAPEX/OPEX savings by significantly reducing transportation requirements, installation time, tower loading and rental fees



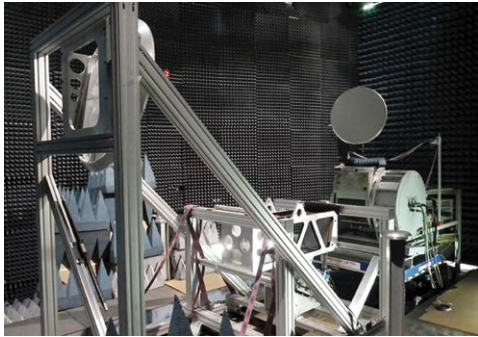
Dual Band Dual Polarized Antenna



# Rosenberger Testing & Compliance

Rosenberger Antennas are qualified in state-of-the-art test facilities, including environmental reliability labs and far-field test range.

- Outdoor & indoor test ranges – accurate & high dynamic range
- Compact antenna test range for millimetre wave measurements
- High class MW & MMW lab for development of new products



## In House Reliability & Qualification

To ensure the best possible standards of our products, we conduct all reliability qualification in house to ensure the performance of the antenna is not degraded over the passage of time.



Vibration



Rain



Temperature/humidity



Salt - Corrosion



Wind Loading



#### Website

For further information refer to our website:

[www.rosenbergertechnologies.com](http://www.rosenbergertechnologies.com)

E-mail: [Enquiry.MWA@rosenbergertechnologies.com](mailto:Enquiry.MWA@rosenbergertechnologies.com)

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