



Antenna Datasheet

Product OC: YEME490WPAM

Version: 1.0

Date: 2026-01-15

Status: Released

Product Name: 4G 4in1 Pole Mount Combo Dual Beam Lens Antenna

Key Features:

Frequency Band: 698–960 MHz

Dimensions: 850 mm × 645 mm × 850 mm

RoHS and REACH Compliant

Overview

The Quectel YEME490WPAM is a high-gain, four-port dual beam lens antenna engineered for precision coverage in modern cellular networks. Operating within the 698–960 MHz frequency range, it is ideally suited for LTE, NB-IoT, and other mid-band applications requiring robust and focused signal delivery. Its standout feature is the generation of two independent beams, each with a $\pm 45^\circ$ polarization and a beam center at $\pm 33^\circ$ in the horizontal plane, allowing for sophisticated sectorization and enhanced capacity in dense deployment scenarios.

With a high gain of $13 \text{ dBi} \pm 1.5$, excellent sidelobe suppression (15 dB), and strong isolation between ports ($\geq 20 \text{ dB}$), this antenna ensures high signal quality and minimizes interference. Its robust mechanical design supports a wide mounting diameter ($\Phi 50 \text{ mm} - \Phi 114 \text{ mm}$), features an ASA radome for durability, and is built to withstand harsh environmental conditions, operating reliably from -40°C to $+70^\circ \text{C}$. As a RoHS and REACH compliant solution from Quectel, the YEME490WPAM delivers the performance, reliability, and precision required for critical outdoor wireless infrastructure.

Quectel provides comprehensive antenna design support such as simulation, testing and manufacturing for custom antenna solutions to meet your specific application needs. We have regional R & D centers to offer quick response to meet your requirements. Please contact our sales & FAEs if you have any requests.

Contents

Overview	1
Contents	2
1 Specification	3
1.1. Electrical.....	3
1.2. Mechanical & Environmental	4
2 Drawing	5
3 Detailed Performance	6
4 Packaging	7
Contact Us	9
Legal Notices	10
Revision History	12

1 Specification

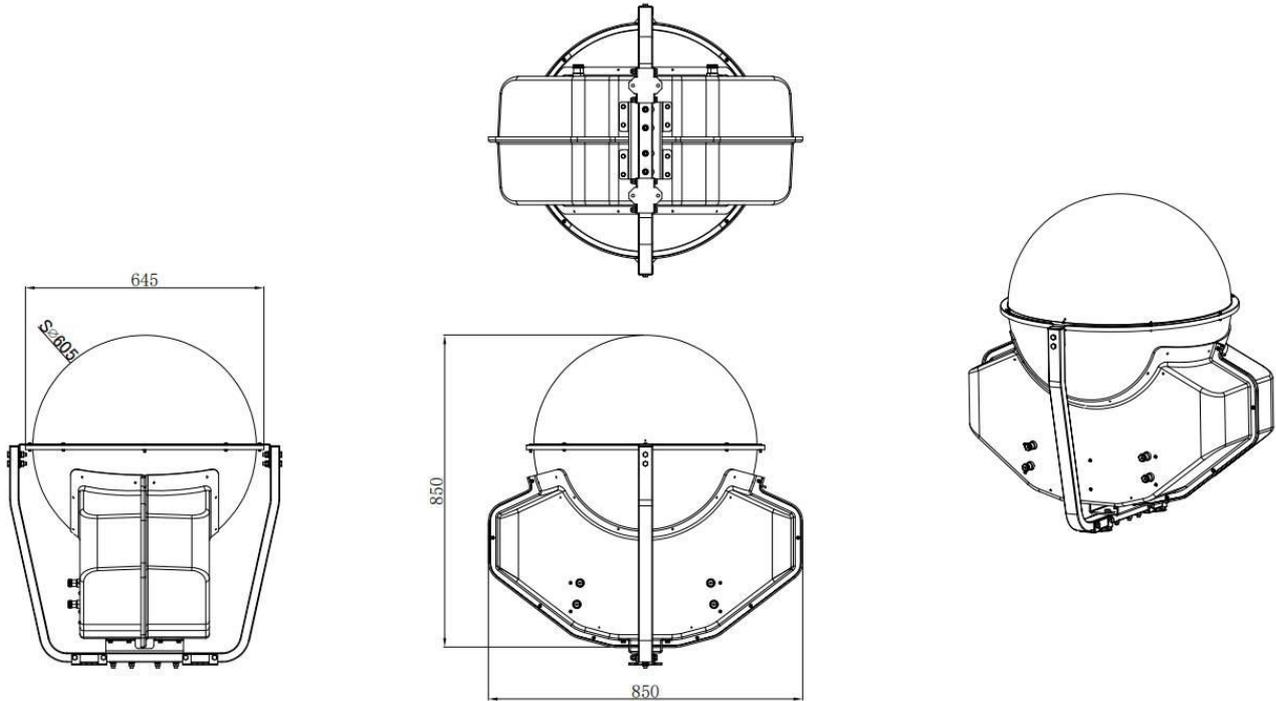
1.1. Electrical

Electrical	
Frequency Range (MHz)	698–960 MHz
Polarization	±45
Gain (dBi)	13 ±1.5
Sidelobe Suppression (dB)	15
Horizontal Plane 3dB Beamwidth (°)	40 ±8
Vertical Plane 3dB Beamwidth (°)	40 ±8
Horizontal beam center (°)	-33, +33
Beam Quantity	2
Horizontal coverage (dB)	120
Beam overlap (dB)	12 ±4
VSWR	≤ 1.5
Isolation Between Polarization (dB)	≥ 25
Isolation Between Beam Port (dB)	≥ 20
Front to Back Ratio (dB)	20
Intermodulation IM3 dBc (2 × 43 dBm)	≤ -150
Power Rating (W)	4 × 200 W
Input Impedance (Ω)	50

1.2. Mechanical & Environmental

Mechanical	
Mechanical Down-Tilt	0–20°
Antenna Dimensions	850 mm × 645 mm × 850 mm
Net Weight	16.35 kg
Gross Weight	34.3 kg
Clip Weight	5.8 kg
Connector	4*4.3.10-Female
Mounting Diameter	Φ 50 mm – Φ 114 mm
Radome Material	ASA
Environmental	
Rated Wind Velocity	55 m/s
Operation Temperature	-40 °C to +70 °C
Operation Humidity	5 %–95 %
Lighting Protection	DC Grounded
RoHS & REACH Compliant	Yes

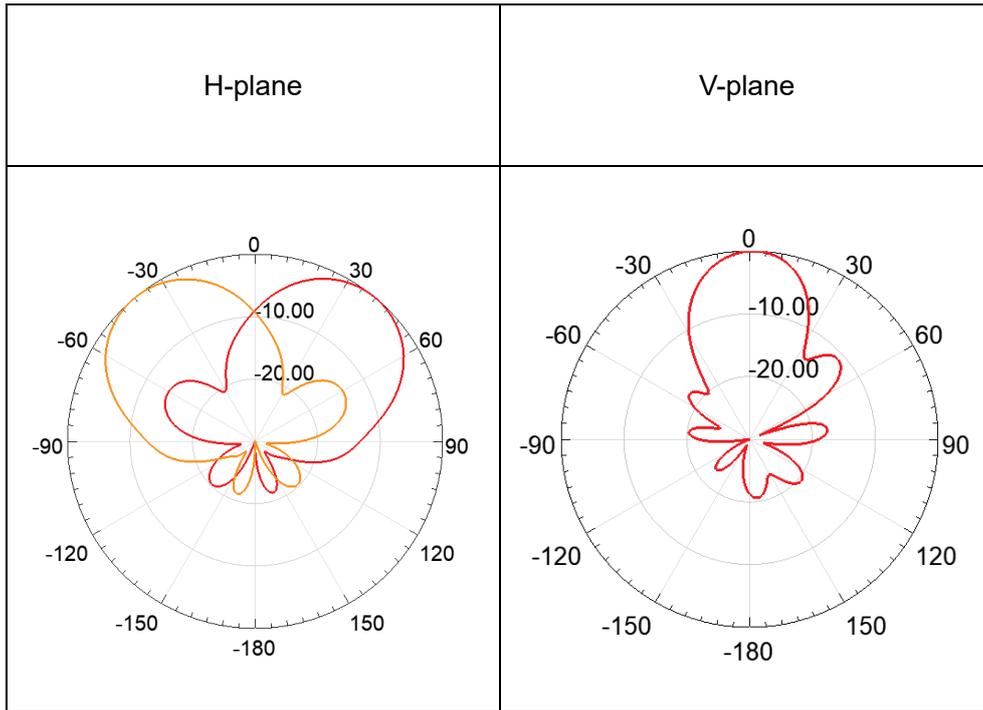
2 Drawing



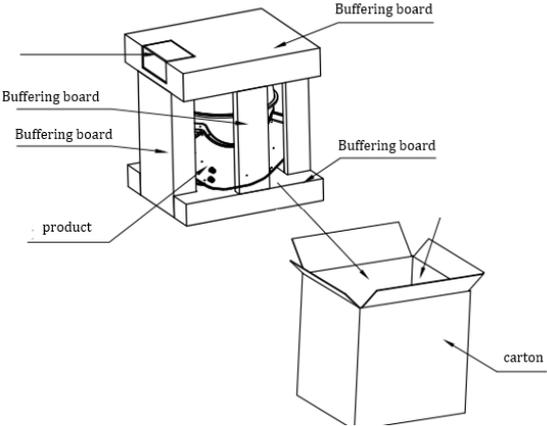
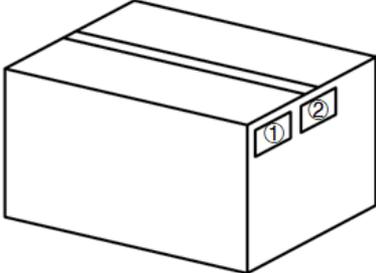
<p>Accessory: Antenna bracket (hot-dip galvanized) 00-ZJ10D(0-12°) Specification: Wall thickness t=4mm Quantity: 1 set</p>	
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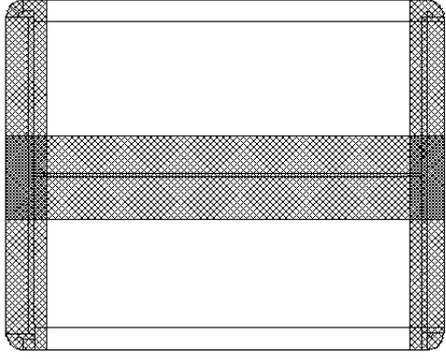
3 Detailed Performance

2D Radiation Pattern



4 Packaging

Step	Packaging Picture / 2D Picture	Description
1		<p>Product drawing</p>
2		<p>Use buffer plates to protect antenna products. (1 Antenna / Carton Box) Estimated quantity Products that cannot fill the entire carton box are packed in a suitable size carton box. <u>Carton Size:</u> <u>L x W x H = 925 x 805 x 995 mm</u></p>
3		<p>Position for Attaching Labels</p> <ul style="list-style-type: none"> ① Carton Label ② Quality Label

4		Sealing Cartons H-shaped sealing cartons
Note	The initial packaging method described above is for reference only, and the final actual packaging method shall be subject to the actual shipping packaging.	

Contact Us

At Quectel, our aim is to provide timely and comprehensive services to our customers. If you require any assistance, please contact our headquarters:

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Or our local offices. For more information, please visit:

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Revision History

Version	Date	Author	Note
-	2026-01-15	Ryder Zhang/ Singh Wang/ Riva Ren/ Aria Chu	Creation of the document
1.0	2026-01-15	Ryder Zhang/ Singh Wang/ Riva Ren/ Aria Chu	First official release



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