

DATASHEET

Radome Enclosed 2.4 GHz Yagi Antenna 9 dBi A2409NJ-DY

With 60° beam width and 60° tilt or swivel mast mount kit. 30cm (1ft) antenna cable with N-Female connector.



Features

- UV stable
- UL flame rated radome
- 60° beam width
- DC short lightning protection
- Light weight, vertical or horizontal polarization, tilt and swivel mast mount

Specifications

Electrical Data

Polarization	Vertical or Horizontal
Frequency (MHz)	2400 to 2500
Gain	9 dBi
Impedance (Ohm)	50
Max. Input Power (Watts)	50
VSWR	< 1.5/1 average
Lightning Protection	DC short

Mechanical Data

Weight	0.21 kg, 0.46 lbs
Number of matings	100
Dimensions (L x D)	152x76 mm, 6x3 inches
Flame Rating	UL 94HB
Mounting	1-1/4" (32mm) to 2" (51mm) diameter masts
Wind Resistance	240 km/h, 150 mph
Cable	0.3 meter, 1 foot

Environmental Data

Operating temperature	-40 to +85°C, -40 to +185°F
Regulatory Compliance	CE2011/65/EU (RoHS DIRECTIVE)

UV-inhibited Polymer

Material Data

Radome Material

Ports



Connector	N-Female	
Cable	Coaxial cable, white, CA-195RW / 50 Ω	

Antenna Gain Patterns



Regulatory Approvals

Visit our website at www.prosoft-technology.com for current wireless approval information.



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Outline Drawings









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Installation Instructions

Important Safety Precautions

LIVES MAY BE AT RISK! Carefully observe these instructions and any special instructions that are included with the equipment you are installing.

IMPORTANT: Look over the site before beginning any installation and anticipate possible hazards, especially these:

Contacting power lines can be lethal

Make sure no power lines can make no contact. Antennas, masts, towers, guy wires or cables may lean or fall and contact these lines. People may be injured or killed if they are touching or holding any part of equipment when it contacts electric lines. Make sure there is NO possibility that equipment or personnel can come directly or indirectly in contact with power lines.

Assume all overhead lines are power lines.

The horizontal distance from a tower, mast or antenna to the nearest power line should be at least twice the total length of the mast/antenna combination. This will ensure that the mast will not contact power if it falls either during installation or later.

To avoid falling, use safe procedures when working at heights above ground

- Select equipment locations that will allow safe, simple equipment • installation.
- Don't work alone. A co-worker can save your life if an accident occurs.
- Use approved non-conducting ladders and other safety equipment. Make . sure all equipment is in good condition.
- If a tower or mast begins falling, don't attempt to catch it. Stand back and • let it fall.
- If anything such as a wire or mast does come in contact with a power line DON'T TOUCH IT OR ATTEMPT TO MOVE IT. Instead, save your life by calling the power company.
- Don't attempt to erect antennas or towers on windy days.

Make sure all towers and masts are securely grounded, and electrical cables connected to antennas have lightning arrestors

This will help to prevent fire damage or human injury in case of lightning, static build-up or short circuit within the equipment connected to the antenna.

- The base of the antenna mast or tower must be connected directly to the building protective ground or to one or more approved grounding rods, using 10AWG ground wire and corrosion-resistant connectors.
- Refer to the National Electrical Code for grounding details. •

If a person comes in contact with electrical power and can't move

- Don't touch that person, or you may be electrocuted.
- Use a non-conductive dry board, stick or rope to push or drag them so they are no longer in contact with electrical power.
- Once they are no longer contacting power, administer CPR if you are certified, and make sure that emergency medical aid has been requested.



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Location

- 1. The antenna receives and transmits within a horizontal angle of 60°. Orient the antenna so linked equipment will be in this beam width. The center of the antenna beam is the long axis of the antenna, with the beam pointing away from the mast.
- 2. Surrounding objects, such as metal structures, trees, power lines, other antennas, etc. will reduce antenna efficiency and may block signals. Choose a location that is high and clear of obstruction.
- 3. Make absolutely sure, that the location is safe, especially from possible contact with power lines. See warning on back.

Mounting

Vertically Polarized Mounting



- 1. The antenna can be mounted vertically polarized (Figure A) or horizontally polarized (Figure B). The factory default assembly is vertically polarized.
- Mount the antenna as shown, ensuring the U-Bolt nuts are securely 2. tightened to prevent antenna shift in high wind.
- 3. The antenna can be mounted in an up or down tilt position from 0-60°.



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L-Bracket Mounting Options

L-Bracket shown for down-tilt mounting. For up-tilt, rotate bracket 180° when attaching to antenna.



Horizontally Polarized Mounting



- 1. To mount the antenna in the horizontal polarized position, rotate the antenna into the position shown in Figure B. The cable should be exiting from the side of the antenna with the plugged drain holes facing down.
- 2. Remove (2) drain hole plugs from the bottom and insert them into the side holes.
- 3. Attach the antenna to the L-Bracket using the (4) pan head screws.



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Ordering Information

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