

Black Optimized Yagis - BMOY

890-960 MHz

Black MAXRAD Optimized Yagi Antennas

The BMOY yagis have been optimized using a genetic algorithm to achieve superior performance over the 900 MHz frequency bands. These antennas feature solid 3/8" elements attached to a seamless aluminum boom with 360° welds and are finished with a black polyester powder coating. Each antenna has a type N termination located at the end of the boom, with a fully sealed driven element for complete protection against humidity, acid rain, or salt spray. A solid aluminum mounting bracket allows for either vertical or horizontal polarization. The BMOY's sturdy construction and advanced design provides outstanding durability and superior performance in all weather conditions.

General Specifications:

890-960 MHz black optimized yagi antennas

Radiator Material:

3/8" solid 6061-T6 aluminum

Polarization:

Linear, vertical or horizontal

Lightning Protection:

DC grounded

Nominal Impedance:

50 Ohms

Mounting Method:

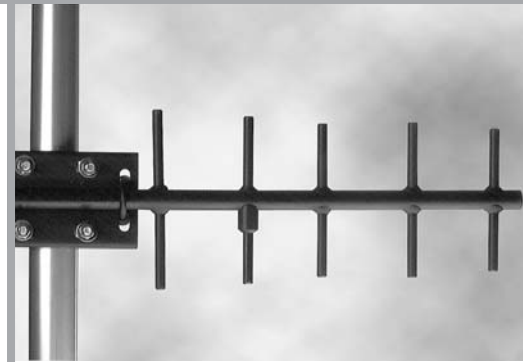
MYK17 bracket for mounting to pipes of up to 1-5/8" OD (included)
MYK14 heavy-duty, cast aluminum mounting bracket for pipes up to 3" OD (optional)

Termination:

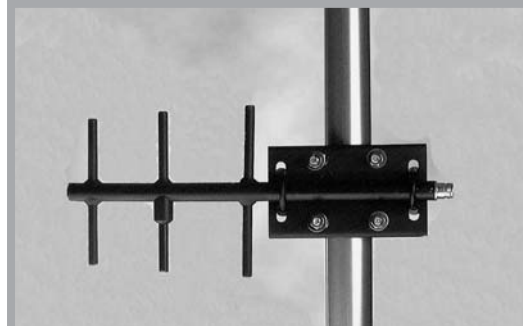
N Female

Features and Benefits:

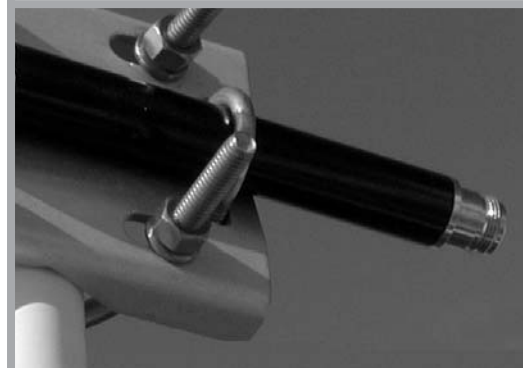
- Broadband performance covering 890 to 960 MHz with no tuning required. Provides optimal performance, minimizes inventory requirements, and reduces installation time.
- 360° welds at element and boom interface. Provide complete protection of the antenna's internal mechanism against moisture.
- Solid aluminum mounting clamps with stainless steel hardware. Ensure a robust installation and allow the antenna to be mounted for horizontal or vertical polarization.
- End-fed type N connector. Makes connector accessible for easier installations and protects the electrical connection from moisture or other weather elements.
- Fully enclosed low loss feed system. No exposed gamma match to corrode or deteriorate.
- Black polyester powder-coated finish. Provides an added layer of protection, maximizing performance and durability under the toughest weather conditions.



BMOY8905 shown with MYK17 bracket



BMOY8903 shown with MYK17 bracket



End fed connector facilitates installation. 360° welded elements and black polyester powder coating provide maximum durability



The MYK14 heavy-duty, cast aluminum mount is optional with both models.

Specifications

Electrical Specifications

Model #	Frequency Range	Gain	Bandwidth @ 1.5:1 VSWR	Horizontal Beamwidth @ 1/2 Power	Vertical Beamwidth @ 1/2 Power	Front-to-Back Ratio	Maximum Power
BMOY8905	890-960 MHz	9.0 dBd	70 MHz	52°	45°	15 dB	150 Watts
BMOY8903	890-960 MHz	6.4 dBd	70 MHz	100°	54°	20 dB	150 Watts

Mechanical Specifications

Model #	Equivalent Flat Plate Area	Lateral Thrust at 125 mph Wind	Bending Moment at 125 mph Wind	Elements	Weight	Mounting Hardware (included)	Mounting Hardware (optional)	Boom Length	Boom Diameter
BMOY8905	.16 ft ²	12.6 lbs	9.5 ft-lbs	5	0.90 lbs	MYK17	MYK14	20.5"	0.75"
BMOY8903	.10 ft ²	7.9 lbs	3.9 ft-lbs	3	0.72 lbs	MYK17	MYK14	14.0"	0.75"