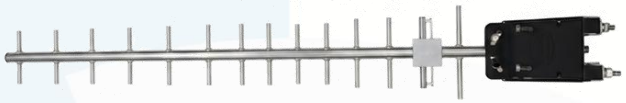
Outdoor Directional Yagi Antenna

OY-MN-V13P

758-869MHz, N-Female, 13dBi Gain, Narrow Beamwidth



- Covers the 758–869 MHz public safety band.
- Narrow beamwidth and high gain with 14-elements design
- Rated for high-wind environments up to 186 mph.
- Supports adjustable antenna tilt.
- Ideal for use as a donor antenna; constructed with anodized, welded aluminum.

Electrical Specification

Product Model	**OY-MN-V13P**
Frequency (MHz)	758-869
Gain (dBi)	13
Polarization	Linear / Preinstalled with Vertical Pol.
Beamwidth Horizontal (°)	35
Beamwidth Vertical (°)	32
VSWR	≤ 1.8
Front to Back Ratio (dB)	≥ 16
Average Power, max (W)	300
Impedance (ohm)	50

Mechanical Specification

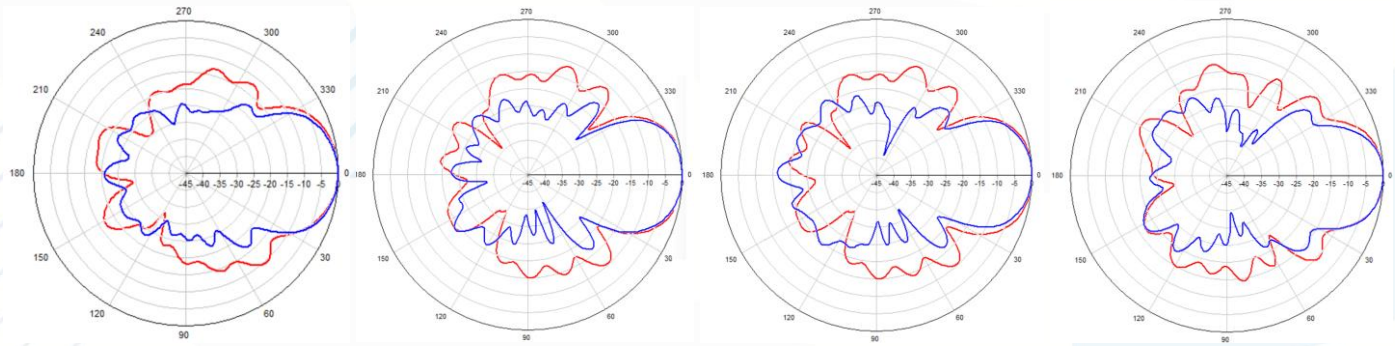
Dimension Diameter, height (in/mm)	54.3 x7.9x 2.0 / 1380x201x50
Weight (lb./kg)	6.1 / 2.75
Shipping Dimension(in/mm)	56.7x9.4x10.6 / 1440x240x270
Shipping Weight(lb./kg)	10.8 /4.9
Radome Material & color	White anodized, welded aluminum finish
Diameter of the pole mounting pole (in/mm)	∅ 1.8-3.0 / ∅45-75
Antenna Tilt adjustment (°)	± 15° max
Maximum Wind Speed(mph)	186
Connector type	N-Female

Environment & Compliance

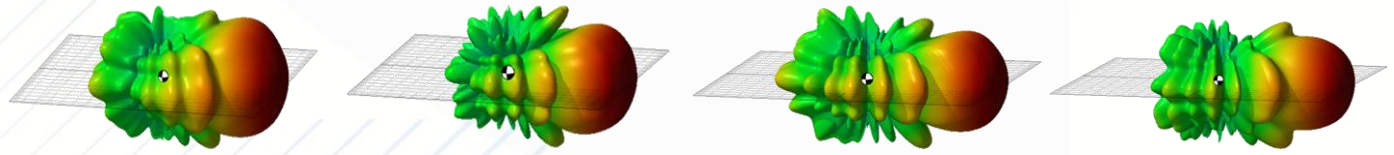
Application	Outdoor
Operating Temperature	-40°C to +70°C
Relative Humidity	Up to 95%
RoHS	Compliant
Environment	
Lightening protection	Direct Grounding

Antenna Pattern

Horizontal Vertical



746MHz 790MHz 820MHz 850MHz



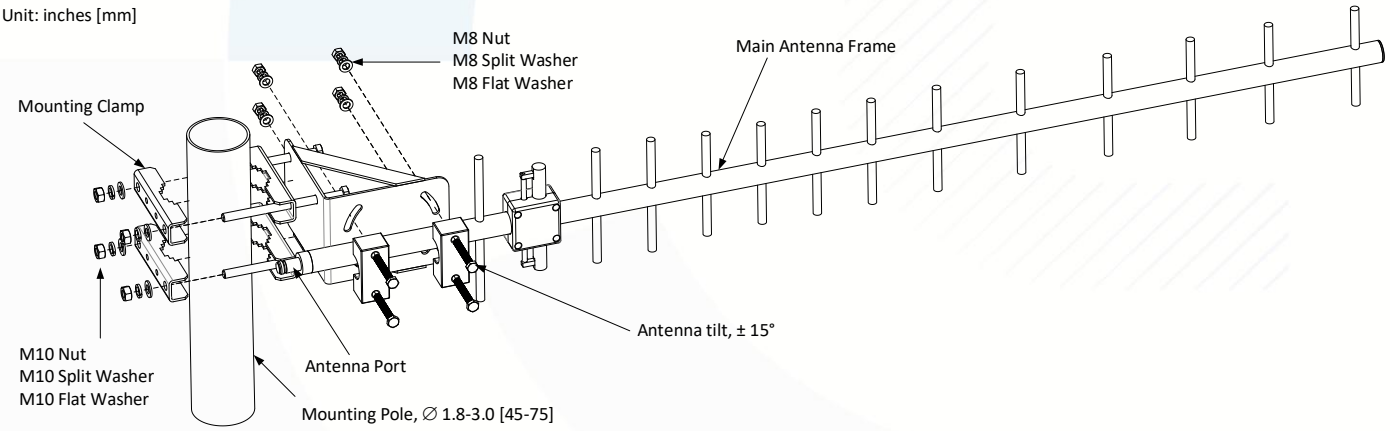
760MHz 790MHz 820MHz 850MHz

Mechanical Drawing and Installation Guide

Installation Instruction

A. The main antenna frame is pre-installed with the mounting bracket, with vertical polarization set as the default.
B. Remove the M10 nut and the antenna mounting clamps, then place the antenna onto the mounting pole.
C. Insert the clamp, M10 washers, and M10 nut in order, and hand-tighten them to hold the antenna in place.
Do not fully tighten the hardware until the final antenna orientation is confirmed. After the direction is set, fully tighten the M10 mounting nut.
D. To adjust the antenna's tilt angle, slightly loosen the M8 nut on the antenna main frame assembly. Adjust the antenna to the desired tilt angle (maximum ±15°).
E. After setting the angle, tighten the M8 nut as shown in the drawing.
F. Connect the equipment and the antenna using the appropriate connectors.
G. Ensure all connections are waterproof. If necessary, apply a cold-shrink tube to seal the antenna connection.
(Cold-shrink tube part number: CST-2806-125 or CST-2806-150)
H. Secure all antenna and equipment cables properly.
I. Position the cold-shrink tube to cover the antenna connector, then slowly pull out the inner core to release the pre-stretched tube. It will automatically contract and seal around the connection.

Unit: inches [mm]



Antenna Tilt Adjustment