

## 700 MHz Industrial Yagi Antenna

Industrial applications require deployment in harsh environments where equipment must survive and operate at top performance during many years of mission critical use.

Cambium's line of premium-grade industrial antennas is designed with the following key features and capabilities:

- Designed to withstand heavy ice, high wind, wide temperature swings and other harsh conditions.
- Manufactured using high strength aircraft-quality aluminum with all joints welded as well as the integral feed line welded for additional strength and improved electrical conductivity.
- · Anodized surfaces for long life, improved aesthetics and corrosion resistance
- · Mounting bracket included to support either Horizontal or Vertical polarization applications
- · Available in both stand-alone and with an optional complete turn-key installation kit
- · Integrated in Cambium's LINKPlanner software for network planning of capacity and availability

## **SPECIFICATIONS**

MODELS	
NB-N500022A-GL	Yagi Antenna, 700 MHz 10 dBd, Single Pol
NB-N500032A-GL	Yagi Antenna with Install Kit, 700 MHz 10 dBd, Single Pol

## **SPECIFICATIONS**

PERFORMANCE	NB-N500022A-GL
Gain	10.0 dBd
Number of Elements	7
Polarization	Single (H or V)
Frequency Range	745 to 806 MHz
Azimuth Half Power Beamwidth	56 degrees
Elevation Half Power Beamwidth	47 degrees
Front to Back Ratio	20 dB
Maximum Power	200 W
Nominal Impedance	50 ohms
PHYSICAL / MECHANICA	AL
Dimensions	26" x 7.5"
Weight	2.2 lbs. (1.0 kg)
Cross-sectional area	0.28 sq ft.
Lateral Thrust @ 150 mph	19.7 lbs.
Lateral Thrust Bending Moment @ 150 mph	18.3 lb-ft.
Lateral Thrust @ 100 mph with 1/2" of ice	28.1 lbs.
CONSTRUCTION	
Materials	Anodized Aircraft quality 6061-T6 aluminum
Attached Cable Lead	Antenna Model: N-type Female Connector on 2 foot (0.6m) lead Antenna with Installation Kit Model: N-type Female Connector on 25 foot lead (8.3m)
Cable	RG213
Mounting Bracket	Clamp bracket for 1/2" to 7/8" diameter yagis. Mounts to masts 1.25" to 2.4" Outside Diameter
ENVIRONMENTAL	
Wind Survival	> 150 mph (241 km/hour)
Temperature Range	-40F to +185F (-40C to +85C)
INSTALLATION KIT CON	TENTS
	<ul> <li>yagi antenna with 25' pigtail weatherproofed and attached to the antenna</li> <li>grounding kit</li> <li>weatherproofing kit (includes (6) rolls of butyl rubber tape, (2) rolls of 3/4" electrical tape, (1) roll of 2" electrical tape)</li> <li>cable ties (qty. 5)</li> <li>RF bulk-head mount surge suppressor, DC BLOCK Lightning Protector</li> <li>short 2' N-type Male to TNC Male jumper to go from surge suppressor inside cabinet over to the radio</li> <li>loose N-type connector for re-terminating cable if shorter length is desired</li> </ul>

<sup>\*</sup> gains are given in dBd relative to the radiating element. This typically equates to a dBi value of - 1dB greater than the provided dBd value in real-world link budgets.