

## 900 MHz Industrial Omni Antennas







NB-N500029A-GL

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:

- HPOL design for better noise immunity and two VPOL options with low-gain and high-gain
- Removable Drain Plug for upright or inverted mounting
- Mounting bracket included
- Optional installation kit for complete turn-key deployments
- Integrated in Cambium's LINKPlanner software for network planning of capacity and availability
- Designed to withstand heavy ice, high wind, wide temperature swings and other harsh conditions.

## **SPECIFICATIONS**

MODELS	
NB-N500029A-GL	Omni Antenna, 899-960 MHz, HPOL, 5 dBi
NB-N500044A-GL	Omni Antenna, 902-928 MHz, VPOL, 5 dBi
NB-N500045A-GL	Omni Antenna, 902-928 MHz, VPOL, 8 dBi
NB-N500041A-GL	(Optional) Antenna Installation Kit, 50 foot; does not include antenna

## **SPECIFICATIONS**

PERFORMANCE	NB-N500029A-GL	NB-N500044A-GL	NB-N500045A-GL
Frequency Range	899 to 960 MHz	902 to 928 MHz	902 to 928 MHz
Gain	5.0 dBi nominal	5.1 dBi nominal	8.1 dBi nominal
Polarization	Single - Horizontal	Single - Vertical	Single - Vertical
VSWR	< 1.7	< 1.5	< 1.5
Return Loss	> 15 dB	> 15 dB	> 15 dB
Elevation 3dB Beamwidth	33 degrees	25 degrees	13 degrees
Maximum Input Power	50 W average	250 W average	250 W average
Nominal Impedance	50 ohms	50 ohms	50 ohms
PHYSICAL / MECHANI	CAL		
Dimensions - Height	680 mm (26.8 inches)	1397 mm (55 inches)	1727 mm (68 inches)
Dimensions - Diameter	Radome: 3.25 inches (82 mm)	Radome: 2 inches (51 mm)	Radome: 2 inches (51 mm)
Weight	4.26 lbs. (1.93 kg)	5.0 lbs. (2.27 kg)	6.0 lbs. (2.72 kg)
CONSTRUCTION			
Materials	Radome: Pultruded Fiberglass	Radome: Pultruded Fiberglass	Radome: Pultruded Fiberglass
Connector	Bulkhead N-type Female	Bulkhead N-type Female	Bulkhead N-type Female
Mounting Bracket	2 inch (50 mm) pole mount	2 inch (50 mm) pole mount	2 inch (50 mm) pole mount
ENVIRONMENTAL			
Wind Survival	125 mph (200 km/hour)	125 mph (200 km/hour)	125 mph (200 km/hour)
Temperature Range	-40F to +158F (-40C to +85C)	-40F to +158F (-40C to +85C)	-40F to +158F (-40C to +85C)
Bending Moment at rated wind	92.3 lb-ft	92.3 lb-ft	92.3 lb-ft
Lateral thrust at rated wind	43.4 IIb-ft	43.4 IIb-ft	43.4 Ilb-ft
Equivalent flat plate area	0.434 ft <sup>2</sup>	0.434 ft <sup>2</sup>	0.434 ft <sup>2</sup>

## **OPTIONAL INSTALLATION KIT CONTENTS**

- 50 ft RG213 cable with N-type female connector
- grounding kit
- weatherproofing kit (includes (6) rolls of butyl rubber tape, (2) rolls of 3/4" electrical tape, (1) roll of 2" electrical tape)
- cable ties (qty. 5)
- RF bulk-head mount surge suppressor, DC BLOCK Lightning Protector
- short 2' N-type Male to TNC Male jumper to go from surge suppressor inside cabinet over to the radio
- loose N-type connector for re-terminating cable if shorter length is desired