

# 90° Asymmetrical Horn Antenna

HORN ANTENNA WITH WIDEBAND PERFORMANCE COVERING 5 GHZ AND 6 GHZ UNLICENSED BANDS

90° Asymmetrical Horn Antennas have asymmetrical beam patterns with highly suppressed sidelobes. They offer excellent noise rejection and supreme scalability options. They are perfect for high-density AP clusters and dense co-location deployments.

#### **Ultimate Wideband Performance**

AH90WB provides unique wideband performance covering 5 & 6 GHz unlicensed spectrum bands with balanced H+V beams and stable gain and radiaton patterns.

AH90WB is equipped with TwistPort<sup>™</sup> waveguide connector allowing for connection directly to waveguide ported radios or use TP Adaptor to common coaxial connectors.

## New Innovative Design

AH90WB has completely new industrial design and is built using highly resistant materials:

- Built of high grade aluminium for extreme outdoor resistance including harsh salt water environments
- Extremely light weight for reduced tower load and more compact for reduced EPA and wind load
- Robust aluminum structural ring to increase strength and stability with UBR mounting bracket
- UBR mounting bracket with stainless steel hardware with anti-seize coating
- Industry leading ergonomics with integrated handle for easy deployment

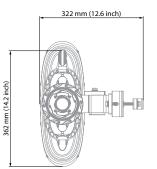
## **TECHNICAL DATA**

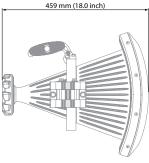
Radio Connection	TwistPort <sup>™</sup> Waveguide Connector
Antenna Type	Horn
Materials	Aluminium, Stainless Steel, ABS, PMMA, Zinc Alloy
Enviromental	IP65
Pole Mounting Diameter	40-80 mm (1.5-3.1 inch) Recommended as close to 80 mm (3.1 inch) as possible
Temperature	-35°C to +60°C (-31°F to +140°F)
Wind Survival	160 km/h (100 mi/h)
Wind Load	65/73 N - Front/Side at 160 km/h (100 mi/h)
Effective Projected Area	537/598 cm <sup>2</sup> - Front/Side (83.2/92.6 in <sup>2</sup> )
Mechanical Adjustment	$\pm$ 20° Elevation, $\pm$ 20° Azimuth
Weight	2.8 kg / 6.2 lbs – single unit ** 4.2 kg / 9.2 lbs – single unit incl. package **
Single Unit	Retail Box: 514 × 423 × 167 mm (20.2 x 16.6 x 6.6 inch) **

## PERFORMANCE

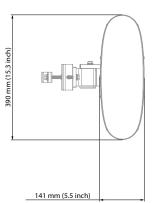
Frequency Range	4900 - 7125 MHz Antenna on WG Port Check our online SpecCheck for performance data of the particular combination of feed (TPA) and antenna
Gain	15 dBi
Azimuth Beam Width -3 dB/-6dB	H 55°, V 73° / H 90°, V 90°
Elevation Beam Width -3 dB/-6dB	H 17°, V 17° / H 25°, V 25°
Beam Efficiency	96 %*
Front-to-Back Ratio	27 dB
VSWR	Check our online SpecCheck for performance data of the particular combination of feed (TPA) and antenna
Polarization	Dual Linear H + V
Impedance	50 Ohm

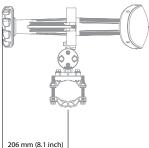
## **PRODUCT DIMENSIONS**





**ELEMENTS**<sup>®</sup>



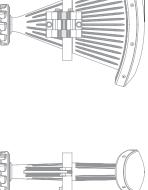


\* Beam efficiency defined up to first null \*\* Subject to change

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This product was produced under the conditions of a certified manage ment system that meets the requirements of the ISO 9001, ISO 14001 and ISO 45001 standard, while this system was certified by QSCert.

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# **Product Datasheet**

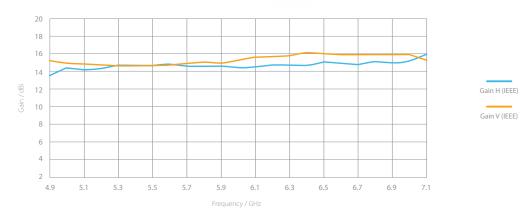
Product ID: AH90WB



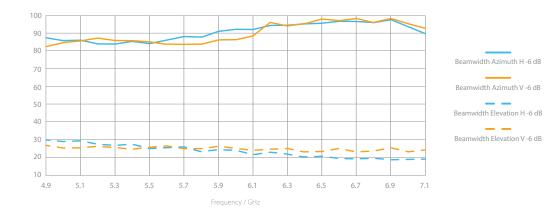
## **ANTENNA GAIN**

### Antenna Nominal Gain with Waveguide Port

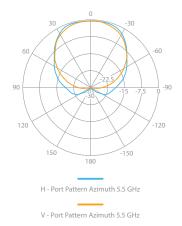
This graph demonstrates the maximum achievable gain of the antenna in boresight with an ideal waveguide port. As we offer various feeding options, we recommend you to check our SpecCheck for detailed performance graphs and specs of the antennas and feeds of your choice.



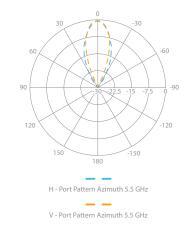
# ANTENNA BEAMWIDTH



# **AZIMUTH PATTERN**



**ELEVATION PATTERN** 



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ISO 45001

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