

# 60° Asymmetrical Horn Antenna

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

60° 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**

AH60WB provides unmatched wideband performance covering entire 5 & 6 GHz unlicensed with balanced H+V beams, stable gain and stable radiaton patterns across entire working band. AH60WB is equipped with TwistPort waveguide connector allowing for connection directly to waveguide ported radios or use TP Adaptor (TPA) to convert common coaxial connectors to a waveguide.

#### **New Innovative Design**

 $AH60WB\ has\ completely\ new\ industrial\ design\ and\ is\ built\ using\ highly\ resistant\ materials:$ 

- Built of high grade aluminum for extreme outdoor resistance such as harsh salt water environment
- 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



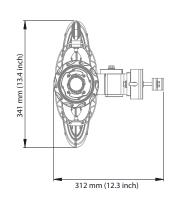
#### **TECHNICAL DATA**

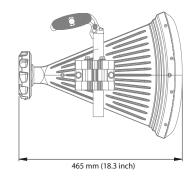
Radio Connection	TwistPort™ Waveguide Connector
Antenna Type	Horn
Materials	Aluminium, Stainless Steel, ABS, PMMA, Zinc Alloy
Enviromental	IP65
Pole Mounting Diameter	40-80 mm (1.5-3.1 inch) Recommended as close to 80 mm (3.1 inch) as possible
Temperature	-35°C to +60°C (-31°F to +140°F)
Wind Survival	160 km/h (100 mph)
Wind Load	29/107 N - Front/Side at 160 km/h (100 mph)
Effective Projected Area	241/881 cm <sup>2</sup> - Front/Side (37.4/136.6 in <sup>2</sup> )
Mechanical Adjustment	± 20° Elevation, ± 20° Azimuth
Weight	2.8 kg / 6.2 lbs – single unit 3.8 kg / 8.4 lbs – single unit incl. package
Single Unit	Retail Box: 525 × 420 × 180 mm (20.7 x 16.5 x 7 inch)

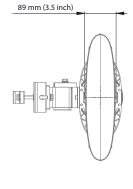
## **PERFORMANCE**

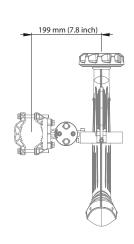
Frequency Range	4900 - 7125 MHz
Gain	16 dBi
Azimuth Beam Width -3 dB/-6dB	H 42°, V 42° / H 63°, V 63°
Elevation Beam Width -3 dB/-6dB	H 16°, V 17° / H 26°, V 25°
Beam Efficiency	96 %*
Front-to-Back Ratio	27 dB
VSWR	<1.8
Polarization	Dual Linear H + V
Impedance	50 Ohm

#### PRODUCT DIMENSIONS









\* Beam efficiency defined up to first null







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### **Product Datasheet**

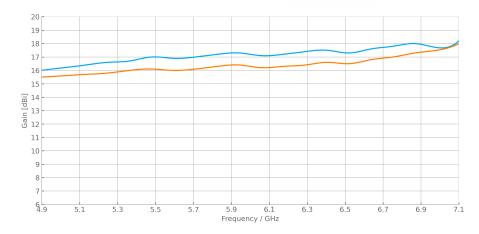
Product ID: AH60WB



### **ANTENNA GAIN**

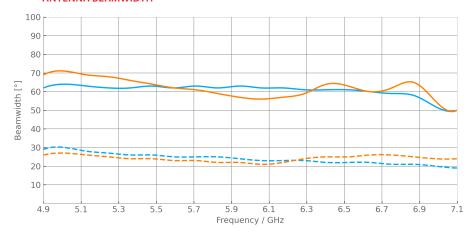
#### Antenna Nominal Gain with Waveguide Port

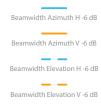
This graph demonstrates the maximum achievable gain of the antenna in boresight with an ideal waveguide port.



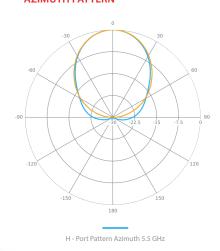
Gain H (IEEE)

#### **ANTENNA BEAMWIDTH**

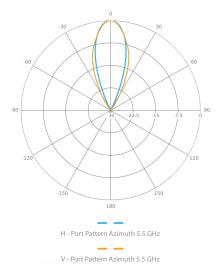




## AZIMUTH PATTERN



## **ELEVATION PATTERN**



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V - Port Pattern Azimuth 5.5 GHz





