Product Datasheet
Product ID: AH45WB

?F23U@ 45° Asymmetrical Horn Antenna

5 + 6 GHx Wgbc`_Ib Scarmp AIrcII_Dmp Fgef+BcIqgrw UGQN Lcrumpiq

AH45WB 45° Wideband Asymmetrical Horn Antennas are engineered for 5 GHz and 6 GHz fixed wireless access (FWA) networks. Designed specifically for Wireless Internet Service Providers (WISPs), it delivers a precisely controlled beam pattern, exceptional interference rejection, and predictable RF performance in dense deployments.

With highly suppressed side lobes and stable radiation characteristics across the entire 4900-7200 MHz wideband spectrum, the AH45WB enables efficient frequency reuse, improved signal-to-noise ratio (SNR), and scalable sector architectures for modern networks.

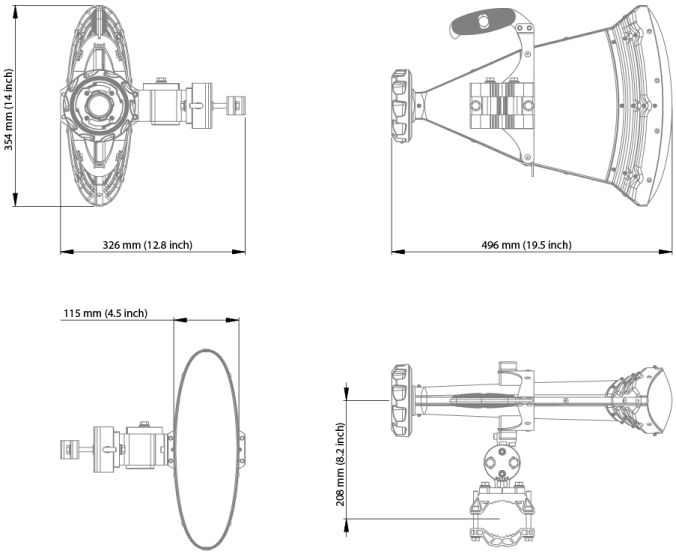
Ideal use cases include 45° high-density sector deployments, 5 GHz primary sectors, 6 GHz primary sectors, wideband 5+6 GHz deployments, 5 GHz or 6 GHz failover configurations, migration-ready wideband installations on high-capacity sites, and dense co-location environments.

AH45WB is manufactured using an innovative production method and built from high-grade aluminum to ensure extreme outdoor resistance, including harsh saltwater environments. Its lightweight construction reduces tower load, making it ideal for high-density tower builds.

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	33/123 N - Front/Side at 160 km/h (100 mph)
Effective Projected Area	271/1018 cm² - Front/Side (37.4/136.6 in²)
Mechanical Adjustment	± 20° Elevation, ± 20° Azimuth
Weight	2.7 kg / 6.0 lbs – single unit 4.1 kg / 9.0 lbs – single unit incl. package
Single Unit	Retail Box: 560 × 450 × 190 mm (22.1 x 18.0 x 7.5 inch)

PRODUCT DIMENSIONS



PERFORMANCE

Frequency Range	4900 - 7200 MHz
Gain	19 dBi
Azimuth Beam Width -3 dB/-6dB	H 29°, V 31° / H 42°, V 45°
Elevation Beam Width -3 dB/-6dB	H 13°, V 13° / H 20°, V 20°
Beam Efficiency	98 %*
Front-to-Back Ratio	33 dB
VSWR	<1.7
Polarization	Dual Linear H + V
Impedance	50 Ohm

* Beam efficiency defined up to first null

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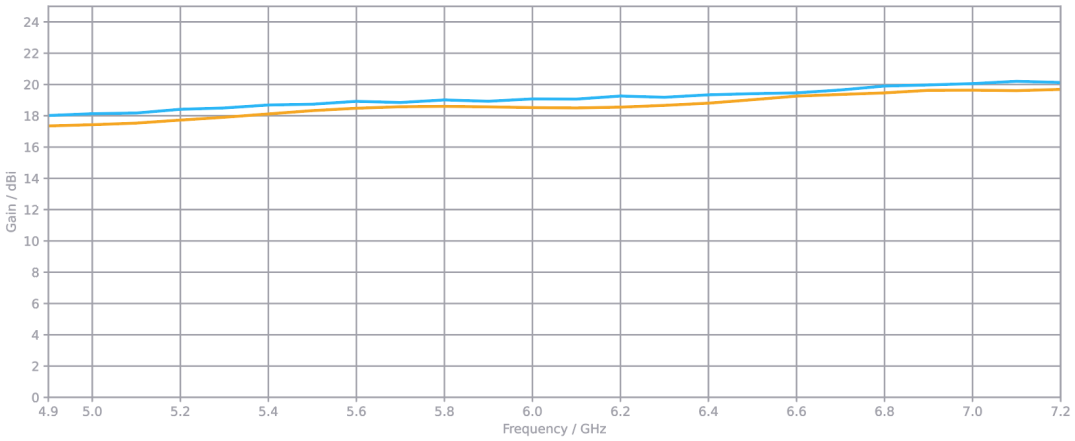
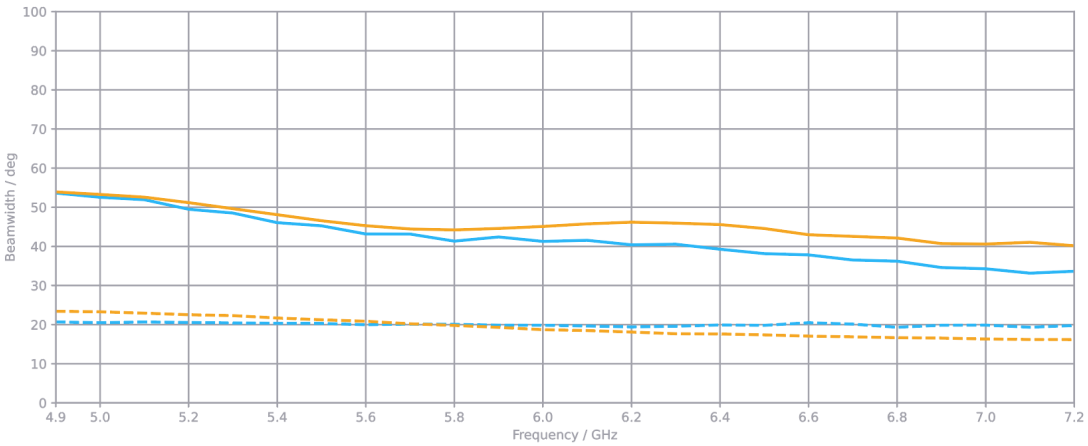
ANTENNA GAIN

Antenna Nominal Gain with Waveguide Port

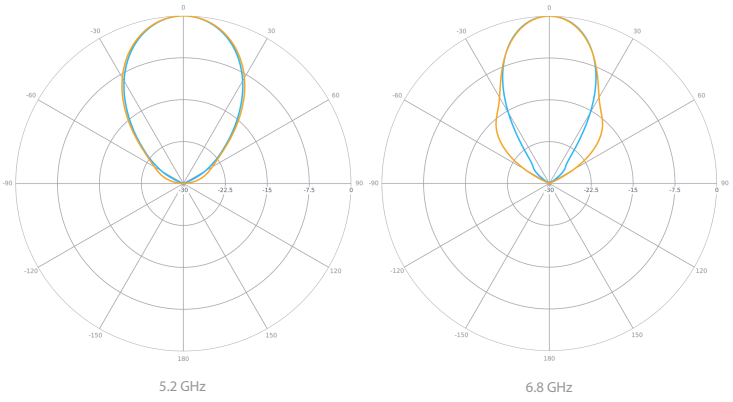
This graph demonstrates the maximum achievable gain of the antenna in boresight with an ideal waveguide port.



ANTENNA BEAMWIDTH



AZIMUTH PATTERN



ELEVATION PATTERN