



AW3941-T0-F

Common Name 4 Port, 13", Band n77 Omni Canister

3300-4200MHz	4	Fixed	8.5	360°
Frequency	Ports	Tilt	Gain	Beamwidth

PRODUCT INFORMATION

The AW3941-T0-F is a 4-port omnidirectional antenna that supports the 3300 – 4200 MHz frequency spectrum. This fixed tilt antenna delivers 8.5 dBi gain in a compact 13" length by 8.6" diameter canister. The antenna offers a smooth Omnidirectional pattern using Alpha Wireless's patented 4x4 MIMO technology which minimizes nulls in the azimuth pattern. The antenna's high gain and minimal azimuth pattern ripple delivers equal coverage in all direction for 4x4 MIMO deployments. This antenna is designed for high capacity C-band sites where a small form factor is important. It enables 360° 4x4 MIMO coverage for 4G and 5G private networks using the 3.5 GHz Citizens Broadband Radio Service (CBRS) and C-band spectrums (bands n48, n77, n78, 42, 43, and 52).



APPLICATION

Alpha Wireless pseudo omni antenna provides 360° coverage whilst in an ultra-compact Radome. This 4X4 MIMO Omni antenna enables improved Azimuth Pattern Control.

Designed for high capacity C-band sites where the smallest form factor is important.

STANDARD & CERTIFICATIONS

Certification	BS EN ISO 9001:2015
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FEATURES

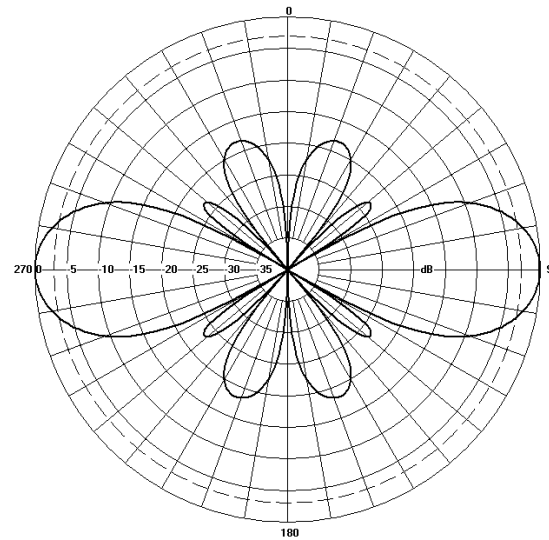
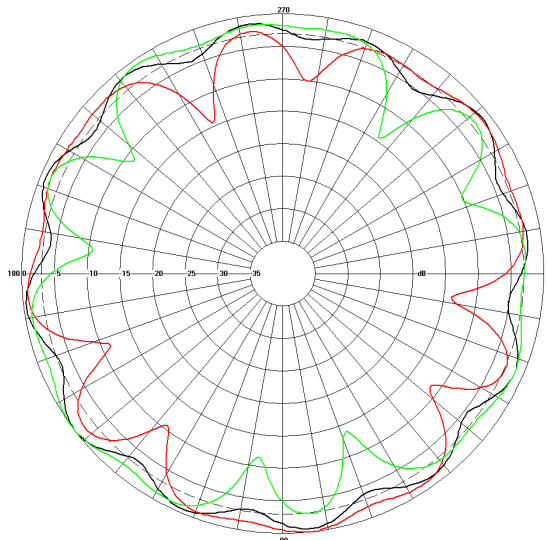
- Covers entire C-band n77 spectrum (including bands n48, n77, n78, 42, 43, and 52).
- Compact 13" x 8.6" (L x Ø) design - Low visual impact.
- Minimal nulls in the azimuth pattern with patented 4x4 MIMO technology
- 4x4 MIMO for maximum throughput

The parameters in this specification follow the definitions and recommendations per NGMN P-Basta, Release 9.6.

TECHNICAL SPECIFICATION

Electrical Specifications					
Frequency Range	MHz	3300-3600	3600-3800	3800-4000	4000-4200
Polarisation	Degree	+/-45°			
Gain	Basta	dBi	8.0±0.5	8.0±0.5	7.9±0.5
	Max	dBi	8.5	8.5	8.4
Azimuth Beamwidth	Degree	360°	360°	360°	360°
Elevation Beamwidth	Degree	23°	23°	23°	23°
Electrical Downtilt	Degree	0°			
Electrical Downtilt Deviation	Degree<	2°			
Impedance	Ohms	50			
VSWR	<	1.5			
Return Loss	dB>	14			
Isolation	dB>	25			
Cross-Polar Discrimination	dB>	10			
Maximum Effective Power Per Port	W	100			

Representative Pattern Files



Azimuth

Elevation

For radiation pattern files, please login at www.alphawireless.com

The green curve represents the azimuth pattern of Ports 1 & 2.

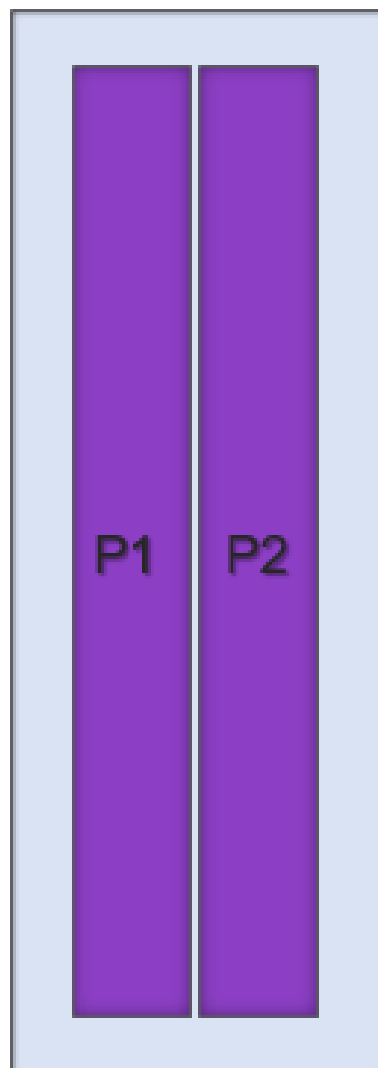
The red curve represents the azimuth pattern of Ports 3 & 4.

The black curve represents the composite azimuth pattern, a smooth Omni pattern with minimized nulls.

TECHNICAL SPECIFICATION

Mechanical Specifications		
Dimensions	mm (in)	331 (13) x 220 (8.6) - (L x Ø)
Packing Size (LxWxD)	mm (in)	400 (15.7) x 295 (11.6) x 445 (17.5)
Net Weight (antenna)	kg (lb)	4.5 (9.9)
Net Weight (mount)	kg (lb)	1.4(3.1)
Shipping Weight	kg (lb)	5.9 (13)
Connector Type (Female)	-	4.3-10
Connector Position	-	Bottom
Connector Quantity	-	4
Windload Frontal (at Rated Wind Speed: 150km/h)	N (lbf)	57 (13)
Windload Lateral (at Rated Wind Speed: 150km/h)	N (lbf)	57 (13)
Survival Wind Speed	km/h (mph)	200 (125)
Radome Material	-	ASA capped ABS
Radome Colour	RAL	7035
Product Compliance Environmental	-	RoHS
Lightning Protection	-	DC Grounded
Cold Temperature Survival	Celsius (Fahrenheit)	-40 (-40)
Hot Temperature Survival	Celsius (Fahrenheit)	70 (158)

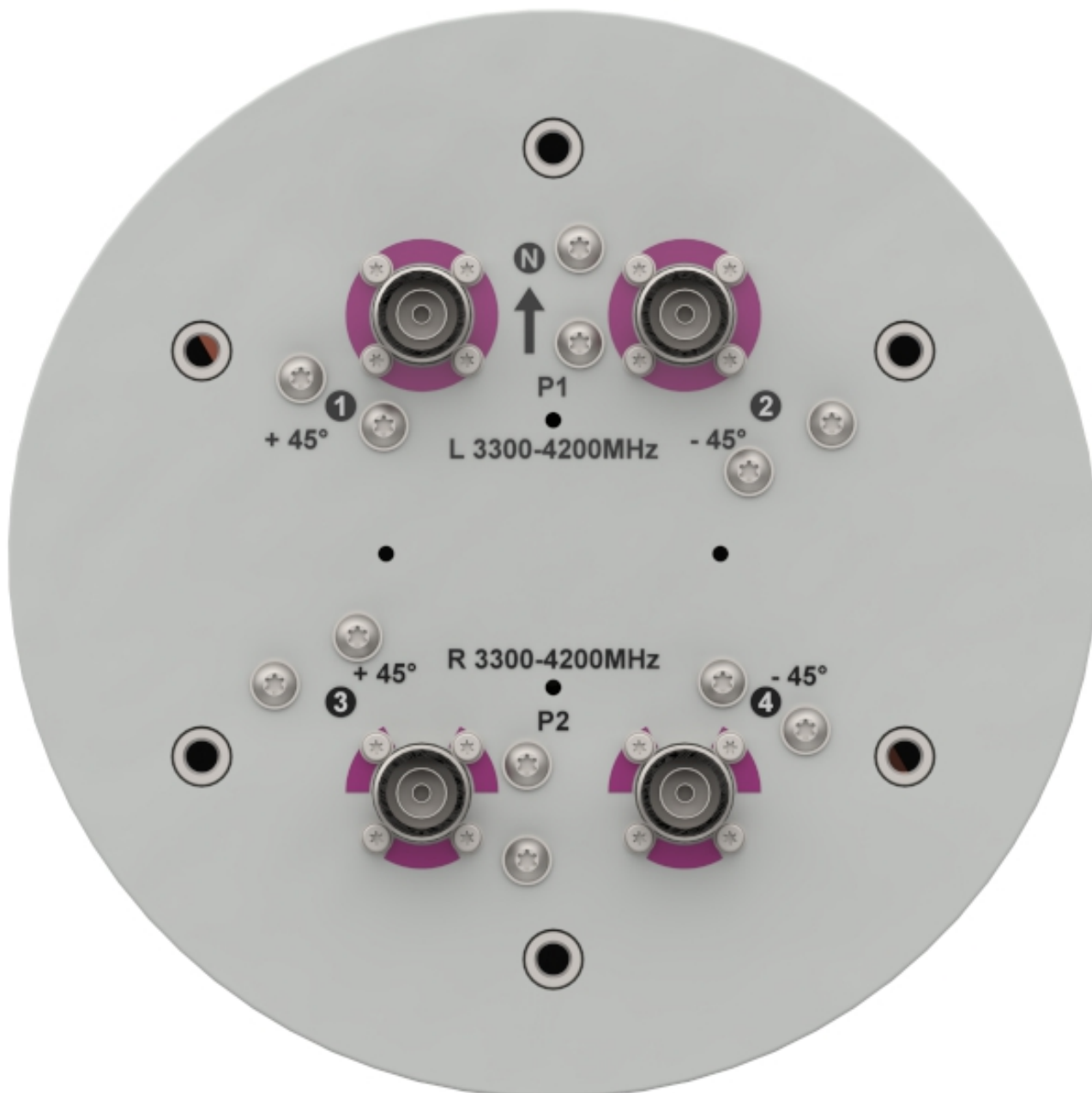
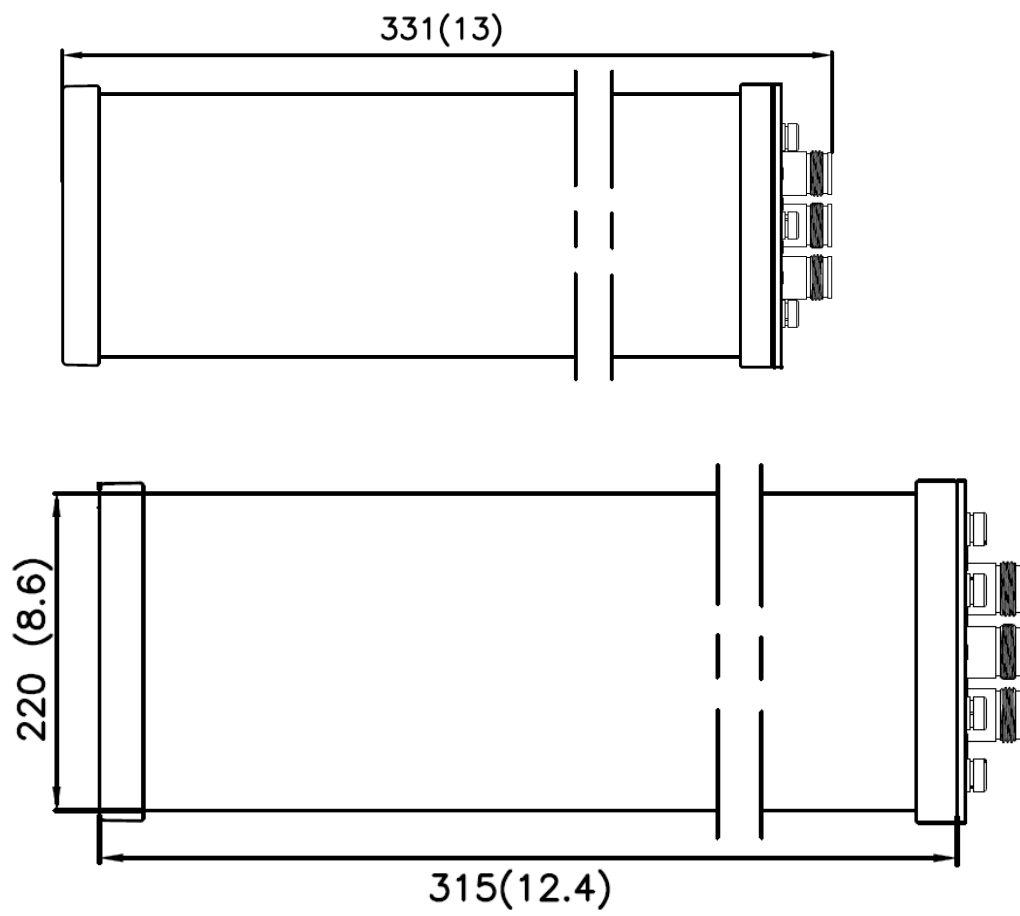
Array Layout and RET Information



Array	Frequency MHz	Ports
P1	3300 - 4200	1 - 2
P2	3300 - 4200	3 - 4

Note: Coloured box sizes do not represent antenna sizes.

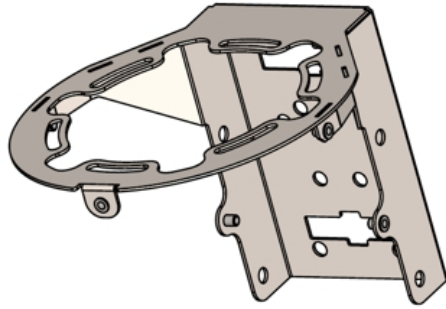
Mechanical Illustration



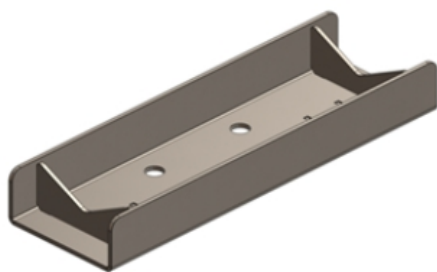
TECHNICAL SPECIFICATION

Mounting Bracket Kit

CL-V-235-V2 Mount Bracket (Included with Antenna)



Antenna Interface Base Bracket



Pole Mount Bracket



Mounting Kit Tilt Range	Mounting Kit Material	Mounting Kit Pole Diameter
0	Stainless Steel	50mm - 254mm (2" to 10")

Ordering Info

Order Code - Antenna

AW3941-T0-F

Order Code - Accessories

AW1012-2-FM-FM

AW1012-2-FM-NM

AW1014-2-FM-TM

Description

Zero degrees Fixed tilt with 4.3-10 connectors.

Description

RF Jumper Cable, connector types 4.3-10 (m) / 4.3-10 (m), length 2 metres (6'6")

RF Jumper Cable, connector types 4.3-10 (m) / N-Type (m), length 2 metres (6'6")

RF Jumper Cable, connector types 4.3-10 (m) / Nex10 (m), length 2 metres (6'6")

Enquiries

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