



DATASHEET

AW3924-T0-F

Common Name- 4 Port, 11", C-Band, 65° Small Cell

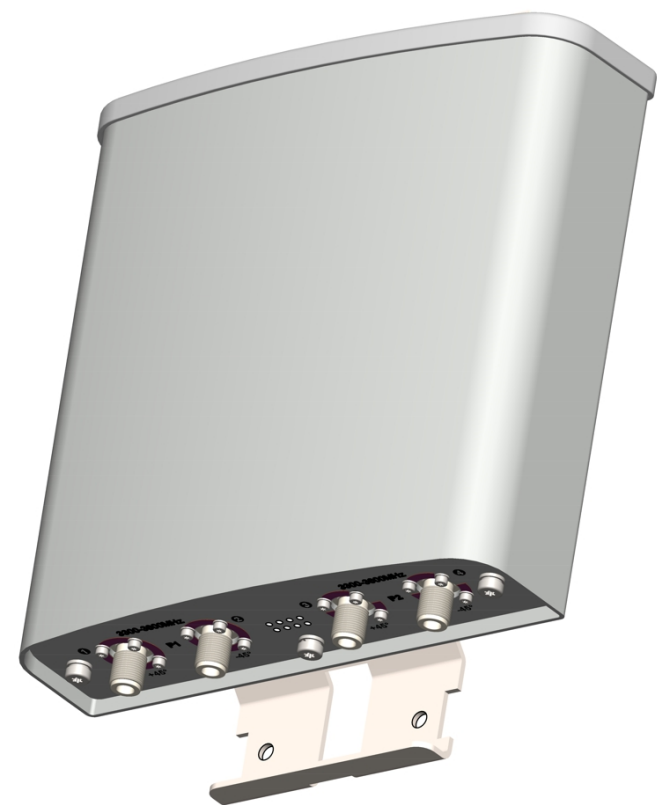
3300-4200MHz	4	Fixed	13.3	65°
Frequency	Ports	Tilt	Gain	Beamwidth

PRODUCT INFORMATION

This ultracompact form factor solution was developed for fixed wireless applications to cover the extended C-band 3300-4200MHz. The AW3924-T0-F provides small cell coverage for 4G and 5G private networks using the 3.5 GHz Citizens Broadband Radio Service (CBRS, n48) and C-band (n77, n78) spectrum. This four port small cell antenna offers a wide elevation beamwidth with a fixed electrical downtilt.

APPLICATION

Alpha Wireless small cell provides sector coverage whilst in an ultra-compact radome design. The wide-band antenna is designed to be installed in urban environment where low visual impact is required. There are a number of mounting options available making deployments on lamp posts, utility poles, walls and other vertical structures possible. The 4 port antenna supports 4X4 MIMO for improved data throughput with options for various fixed tilt settings.



STANDARD & CERTIFICATIONS

Certification	BS EN ISO 9001:2015
---------------	---------------------



FEATURES

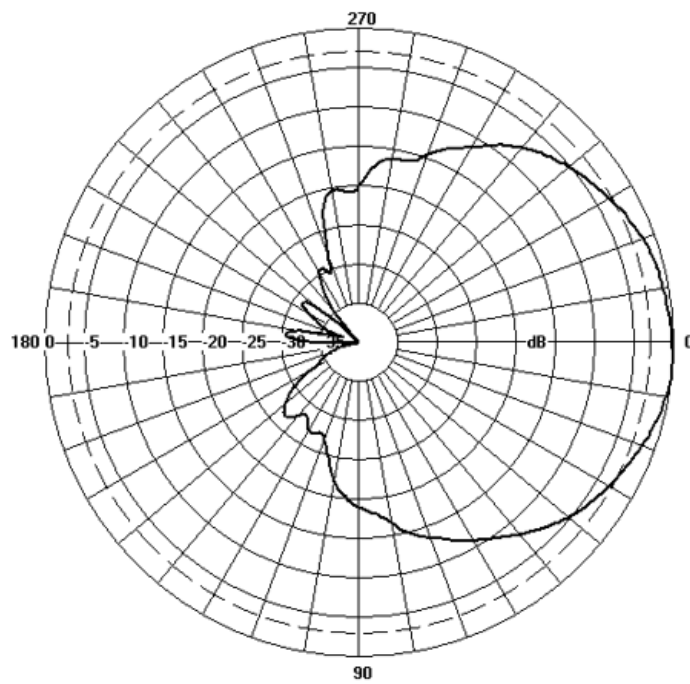
- Wide Band antenna covering 3300-4200MHz
- Covering NR bands n48, n77 and n78.
- Compact design for Small Cell deployment - Low visual impact
- Supports 4x4 MIMO for improved throughput
- Dual Cross polarization antenna +/- 45

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

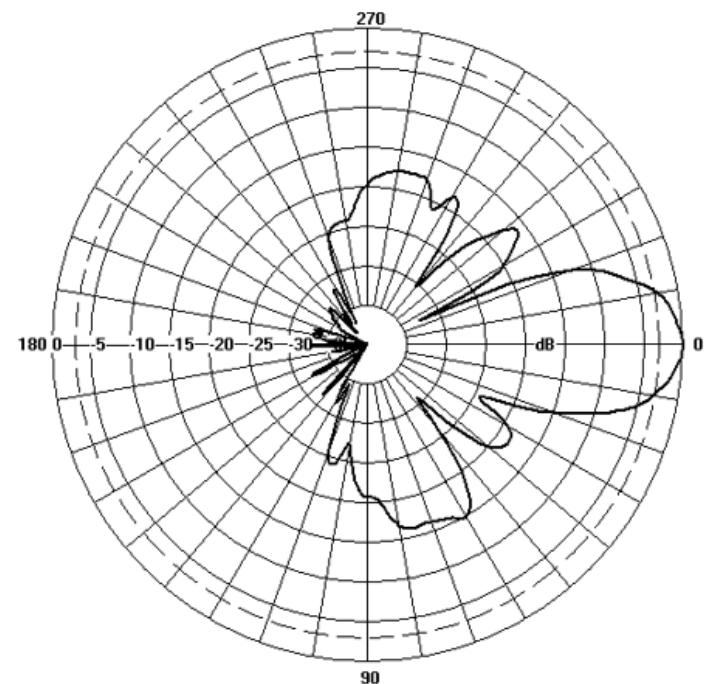
TECHNICAL SPECIFICATION

Electrical Specifications				
Frequency Range		MHz	3300 - 3800	3800 - 4200
Polarisation		Degree	+/- 45° Slant Linear	
Gain	Basta	dBi	12.8±0.5	13.3±0.5
	Max	dBi	13.3	13.8
Azimuth Beamwidth		Degree	65°	
Azimuth Beam Squint		Degree<	3°	
Elevation Beamwidth		Degree	22°	20°
Electrical Downtilt		Degree	T0°	
Electrical Downtilt Deviation		Degree<	1°	
Impedance		Ohms	50	
VSWR		<	1.5	
Return Loss		dB>	14	
Isolation		dB>	25	
Front to Back Ratio: Copolarization +/-30°		dB>	25	
Cross-Polar Discrimination		dB>	16	
Maximum Effective Power Per Port		W	50	

Representative Pattern Files



Azimuth



Elevation

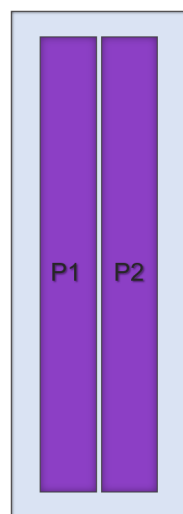
For radiation pattern files, please login at www.alphawireless.com

TECHNICAL SPECIFICATION

Mechanical Specifications

Dimensions	mm (in)	285 (11.2) x 280 (11) x 85 (3.3) - (LxWxD)
Packing Size (LxWxD)	mm (in)	440 (17.3) x 350 (13.8) x 210 (8.3)
Net Weight (antenna)	kg (lb)	2.5 (5.5)
Net Weight (mount)	kg (lb)	1.5 (3.3)
Shipping Weight	kg (lb)	4 (8.8)
Connector Type (Female)	-	4.3-10
Connector Quantity	-	4
Connector Position	-	Bottom
Windload Frontal (at Rated Wind Speed: 150km/h)	N (lbf)	105 (24)
Windload Lateral (at Rated Wind Speed: 150km/h)	N (lbf)	34 (8)
Survival Wind Speed	km/h (mph)	200 (125)
Radome Material	-	ASA
Radome Colour	RAL	7035
Product Compliance Environmental	-	RoHS
Lightning Protection	-	DC Grounded
Cold Temperature Survival	°C (°F)	-40 (-40)
Hot Temperature Survival	°C (°F)	70 (158)

Array Layout and RET Information



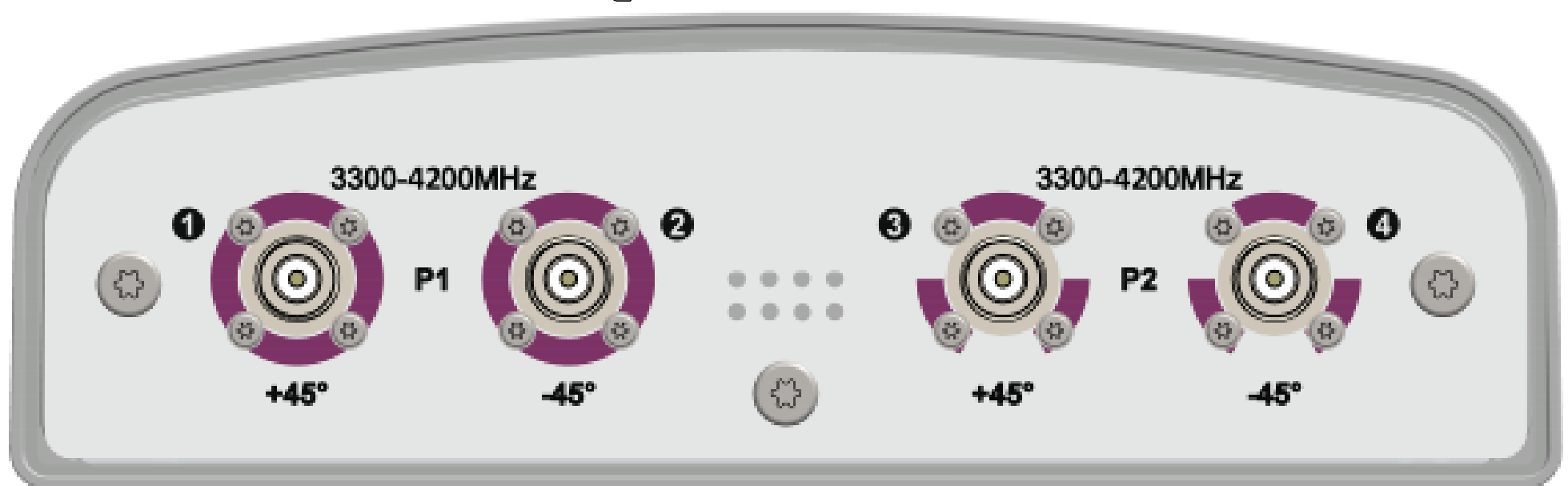
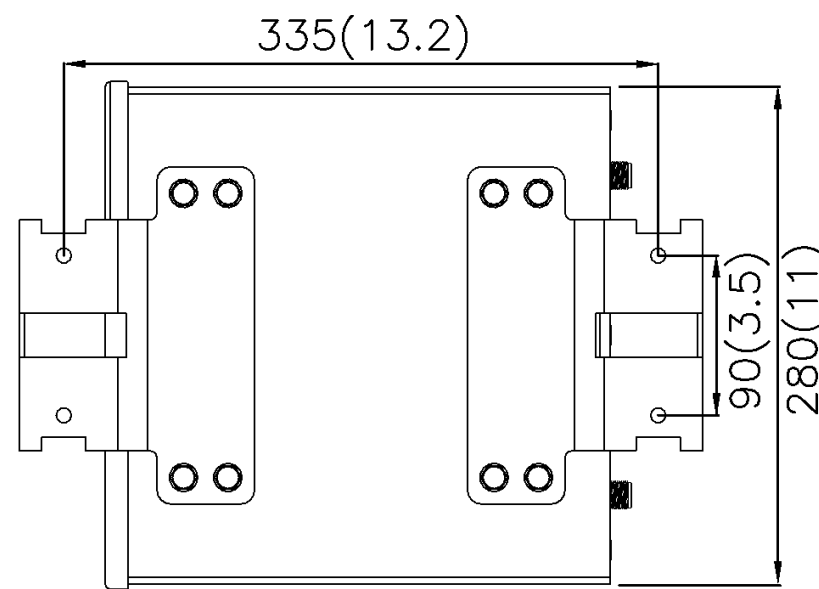
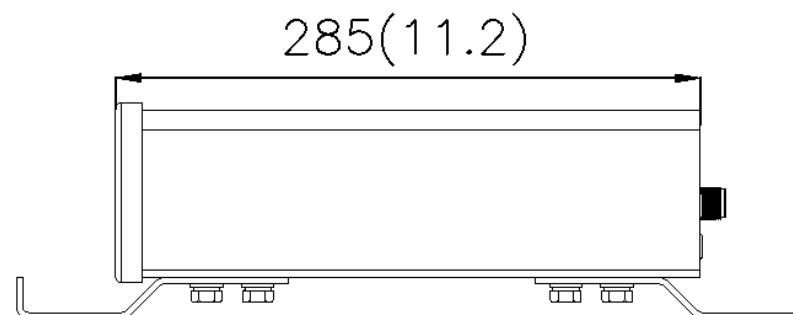
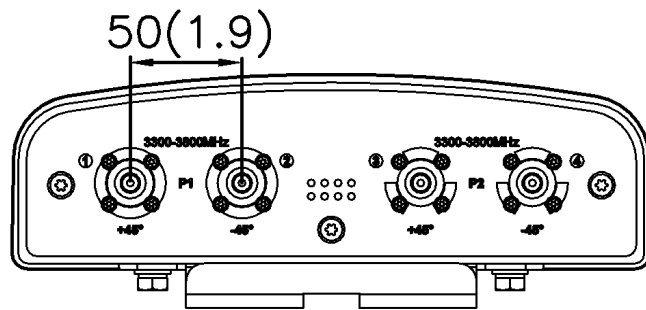
Array	Frequency MHz	Ports
P1	3300 - 4200	1 - 2
P2	3300 - 4200	3 - 4

Note: Coloured box sizes do not represent antenna sizes.

TECHNICAL SPECIFICATION

Mechanical Illustration

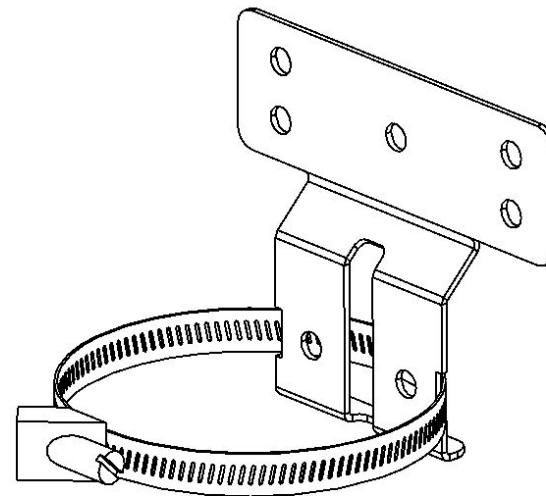
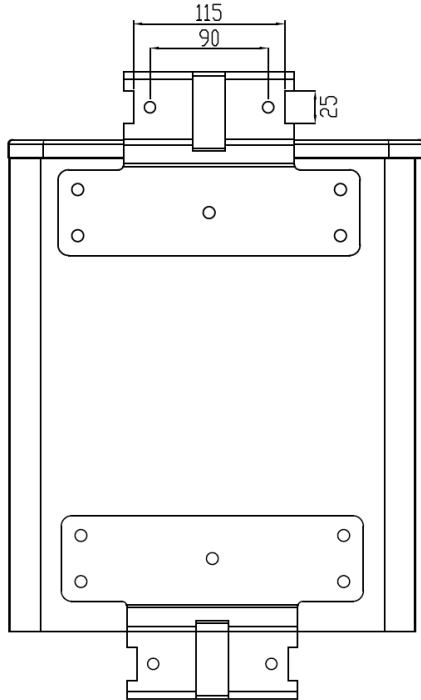
All measurements are in mm (in)



TECHNICAL SPECIFICATION

Mounting Bracket Kit

CL-V-158 (Mounting Kit included with Antenna)



Mounting Kit Tilt Range	Mounting Kit Material	Mounting Kit Pole Diameter
n/a	Stainless Steel	50mm-115mm (2" to 4.5")

Ordering Info

Order Code - Antenna

AW3924-T0-F

Description

AW1012-2-FM-FM

AW1012-2-FM-NM

AW1014-2-FM-TM

Description

Zero Degrees Fixed Tilt with 4.3/10 Connectors

Order Code - Antenna

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

Global Headquarters

Ashgrove Business Centre,
Ballybrittas, Portlaoise,
R32 DT0A, IRELAND
sales@alphawireless.com
+353 57 86 33847

North America

7301 W. 129th Street, Suite 150,
Overland Park,
KS 66213, USA
sales@alphawireless.com
+1 913 279 0008

Australia

3/76 Regentville Rd,
Jamisontown,
NSW 2750, AUSTRALIA
sales@alphawireless.com
+ 61 2 4504 8212

DISCLAIMER

The information in this document is provided solely regarding Alpha Wireless products. The information is not a guarantee of performance or characteristics. Alpha Wireless reserves the right to modify, change, amend, improve or make corrections to this document and its products, at any time and its sole discretion without prior written consent or notice. No license to any intellectual property rights is granted or implied under this document. Alpha Wireless disclaims warranties and liabilities of any kind including non-infringement of intellectual property rights of any third party.