



AW3747

Common Name 12 Port - Fixed Tilt - Omni Pattern

617-894 / 1695-2690 / 3400-3800 / 5150-5925MHz

12

Fixed

2/8/5/5

360°

Frequency

Ports

Tilt

Gain

Beamwidth

PRODUCT INFORMATION

This product design is intended to offer multiple ports across multiple bands. There are four Low Band ports, four Mid Band Ports, four CBRS ports and four LAA ports. The Low Band extends down to the 617MHz band using wideband technology.

Low band, Mid band, CBRS and LAA are Fixed Tilt.

Unit meets FCC Part 15.407 (a) (1) (i) for U-NII Band requirements.

APPLICATION

This Alpha Wireless multi-port multi-band small cell provides a solution where 24" height is important. This antenna has been designed for use in both Venue and Right of Way type deployments.

There are a number of mounting options available making deployments on lamp posts, utility poles, walls and other vertical structures possible. A bracket that straps the antenna vertical to a pole comes as standard. This can be upgraded to a mount bracket that enables mechanical tilt if required.

STANDARD & CERTIFICATIONS

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



FEATURES

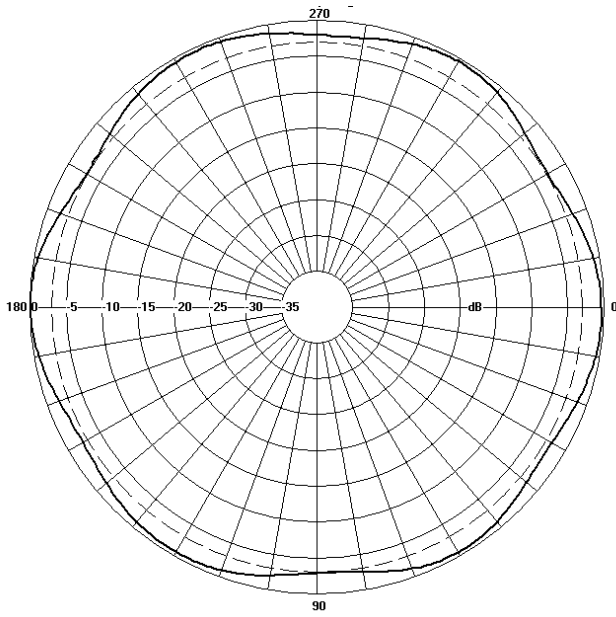
- High Port count enabling multiple operators.
- High Data rate frequency bands covered including Mid Band, CBRS and LAA.
- Low Band extends down to 617MHz
- Compact design for low visual impact.
- Meets current U-NII-1 requirements for gain and upper side lobe performance.
- Manufactured in Ireland.

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

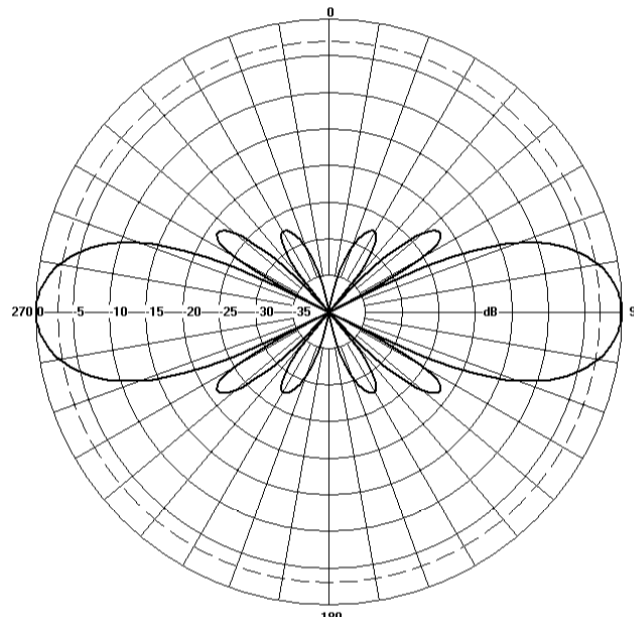
TECHNICAL SPECIFICATION

Electrical Specifications		Low Band				Mid Band				3.5/ 5.5GHz	
Frequency Range per Input	MHz	617-686	686-755	755-824	824-894	1695-1995	1920-2170	2170-2500	2500-2690	3400-3800	5150-5925
Polarisation		+/- 45° Slant Linear									
Gain	dBi	2.1	2.5	2.0	2.1	7.8	8.3	8.0	8.5	5	5
Azimuth Beamwidth	Degree	360°	360°	360°	360°	360°	360°	360°	360°	360°	360°
Azimuth Beam Squint	Degree <	5°	5°	5°	5°	5°	5°	5°	5°	3°	3°
Elevation Beamwidth	Degree	88° ±9°	72° ±8°	66° ±7°	64° ±8°	19° ±2°	17° ±2°	15° ±2°	13° ±2°	33° ±3°	26° ±3°
Electrical Downtilt	Degree	T0°	T0°	T0°	T0°	T0°	T0°	T0°	T0°	T0°	T0°
Electrical Downtilt Deviation	Degree <	5°	5°	5°	5°	1.5	1.5	1.5	1.5	3.0	3.0
Impedance	Ohms	50	50	50	50	50	50	50	50	50	50
VSWR	NA <	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Return Loss	dB >	14	14	14	14	14	14	14	14	14	14
Isolation	dB >	25	25	25	25	27	27	27	27	22	22
Passive Intermodulation	dBc <	-153	-153	-153	-153	-153	-153	-153	-153	N/A	N/A
Cross Polar Discrimination	dB >	16	16	16	16	10	10	10	10	10	10
Maximum Effective Power Per Port	W	100	100	100	100	250	250	250	250	50	1

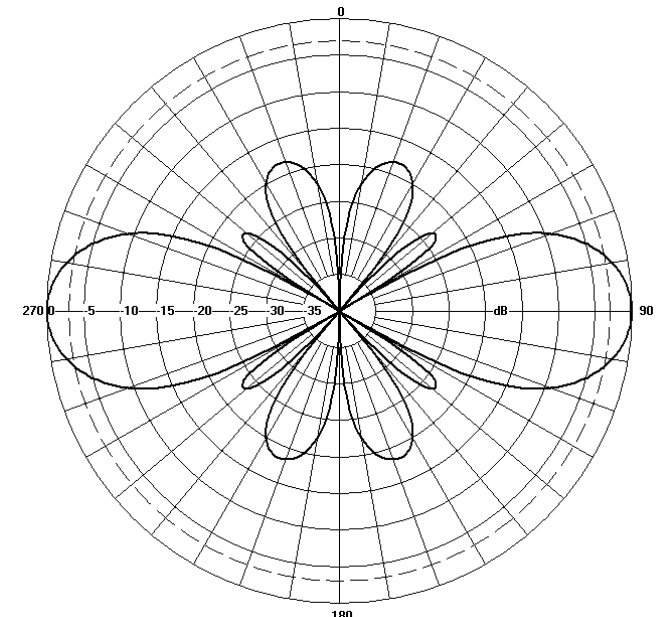
Radiation Pattern Files



Azimuth



1695 - 2690MHz



3.5GHz / 5.5GHz

Elevation

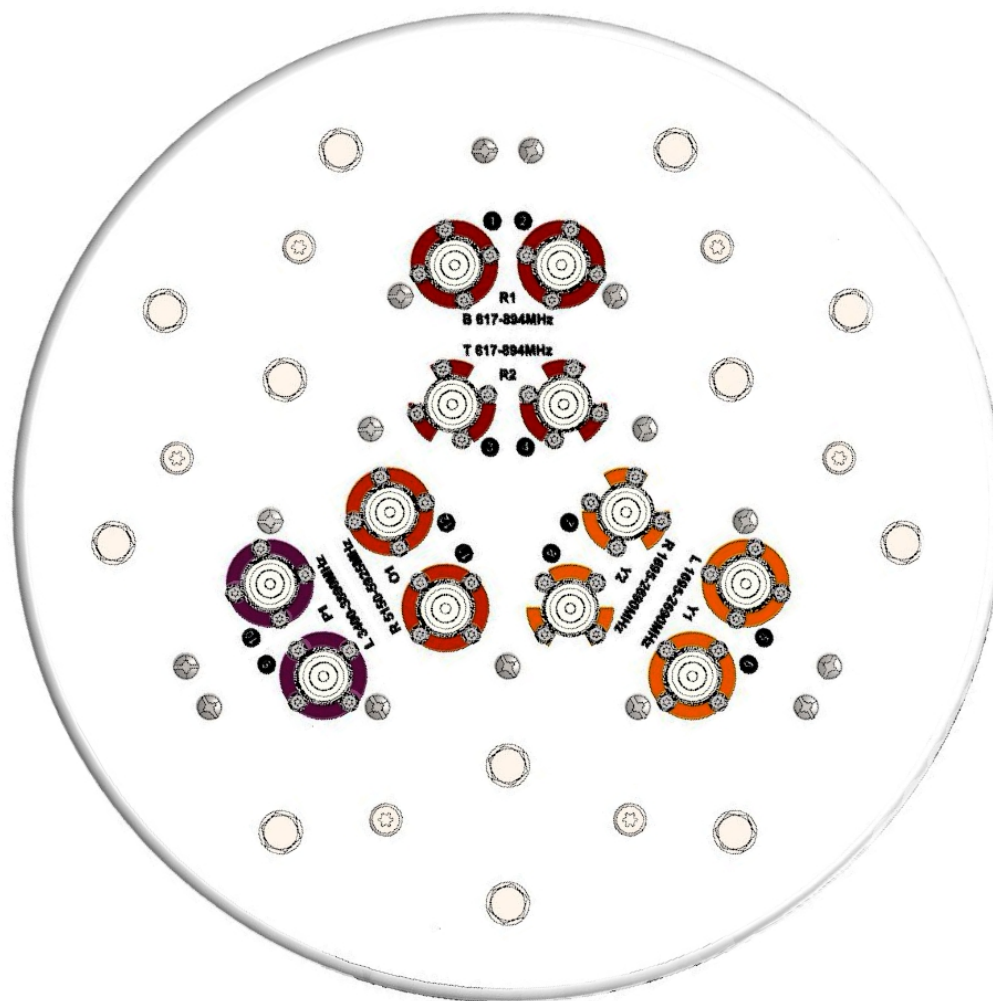
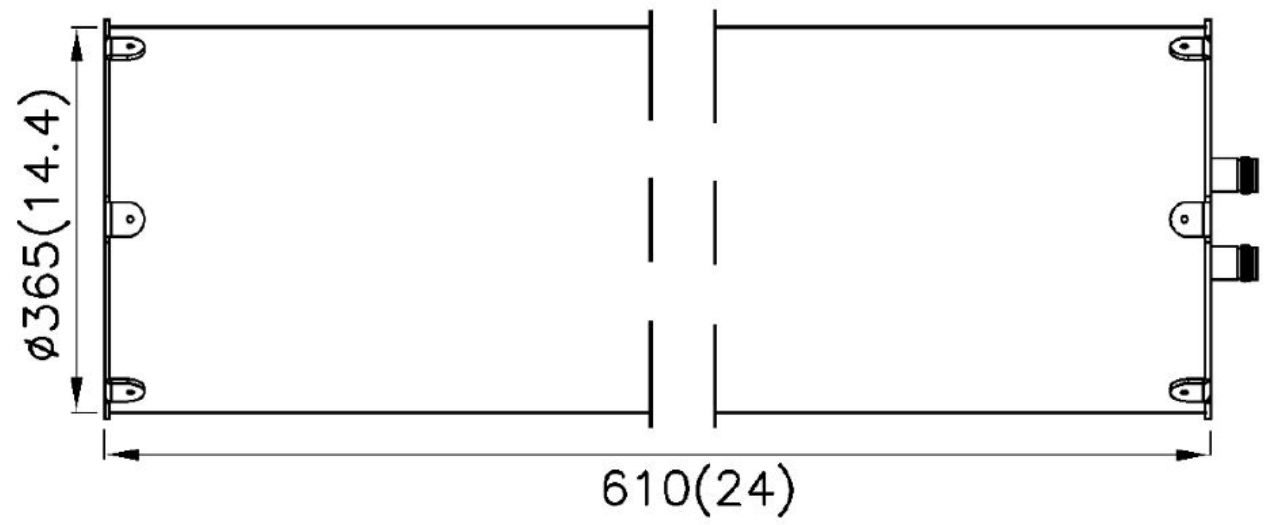
TECHNICAL SPECIFICATION

Mechanical Specifications

Dimensions	mm (in)	610 (24) x 365 (14.4) - (L x D)
Packing Size (LxWxD)	mm (in)	685 (27) x 447 (17.6) x 447 (17.6)
Net Weight (antenna)	kg (lb)	6.1 (13.4)
Net Weight (mount)	kg (lb)	5.9 (13)
Shipping Weight	kg (lb)	14 (31)
Connector Type (Female)	-	4.3-10
Connector Position	-	Bottom
Connector Position Quantity	-	12 (4P Low band, 4P Mid band, 2P High band CBRS & 2P High Band LAA)
Windload Frontal (at Rated Wind Speed: 150km/h)	N (lbf)	180 (40)
Windload Lateral (at Rated Wind Speed: 150km/h)	N (lbf)	180 (40)
Survival Wind Speed	km/h (mph)	200 (125)
Radome Material	-	ASA Capped ABS
Radome Colour	RAL	7035
Product Compliance Environmental	-	RoHS
Lightening Protection	-	DC Grounded
Cold Temperature Survival	Celsius (Fahrenheit)	-40 (-40)
Hot Temperature Survival	Celsius (Fahrenheit)	70 (158)

TECHNICAL SPECIFICATION

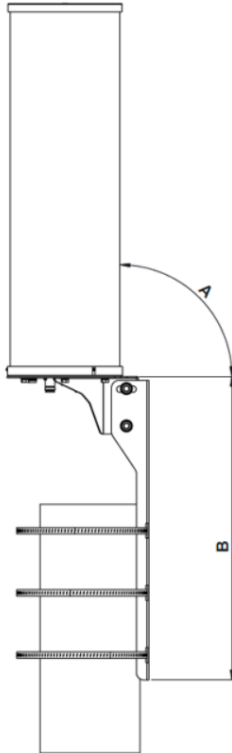
Mechanical Illustration



TECHNICAL SPECIFICATION

Mounting Bracket Kit

CL-V-159 (Mounting Kit Included with Antenna)



Mounting Kit Tilt Range	Mounting Kit Material	Mounting Kit Pole Diameter
0	Stainless Steel	N/A

ORDERING INFO

AW3747-T0-F Zero degrees Fixed Tilt with 4.3-10 Connectors.

Enquiries

Ireland
 Ashgrove Business Centre,
 Ballybrittas, Portlaoise, Ireland
 Post code: R32 DT0A
sales@alphawireless.com
 +353 57 86 33847

USA
 11322 W 79th St, Lenexa, KS
 66214, USA
sales@alphawireless.com
 +1 913 279 0008

Alpha Wireless



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.

© Alpha Wireless Limited 2014