



AW3724-M-F

Common Name 18 Port, (4P/8P/4P/2P), 24", 65°, Low Band, Mid Band, CBRS & LAA Small Cell

Frequency	Ports	Tilt	Gain	Beamwidth
617-894MHz	4	Fixed	8.2	65°
1695-2690MHz	8	MET	14	65°
3300-4200MHz	4	Fixed	11	65°
5150-5925MHz	2	Fixed	6	65°

PRODUCT INFORMATION

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

On Midband there is Mechanical Electrical Tilt adjustment. The eight Midband ports are split into two groups of four and tilt is controlled as per table below.

MET	Control
Tilt Screw 1	Ports 1 - 4
Tilt Screw 2	Ports 5 - 8

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



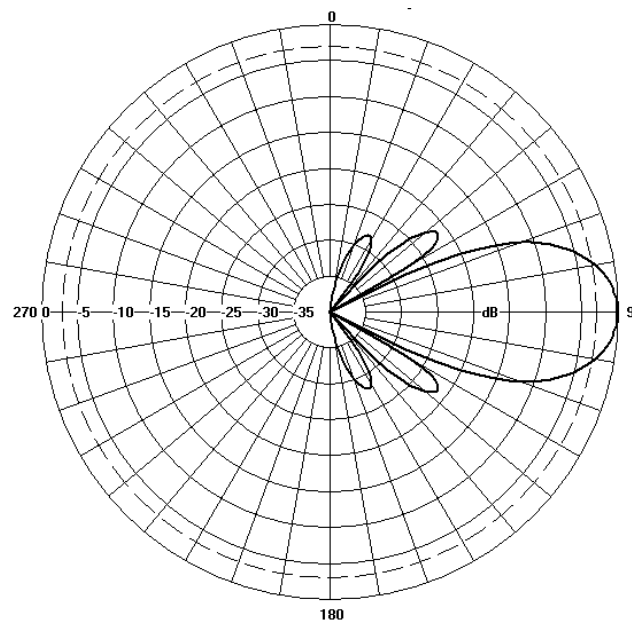
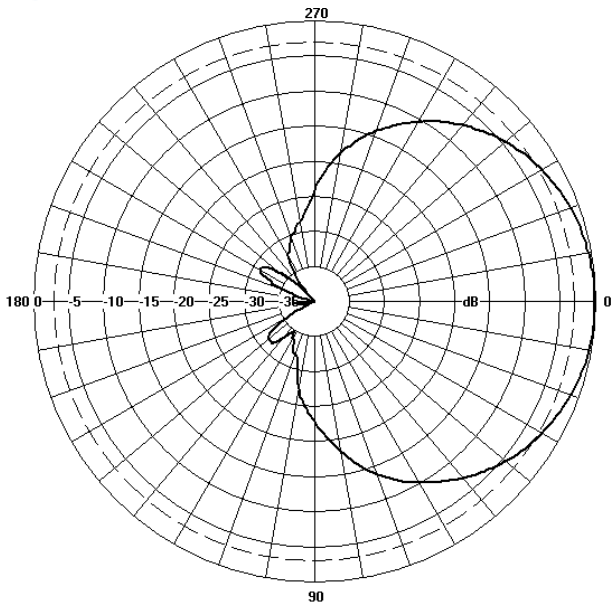
FEATURES

- 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.
- Variable Tilt on Midband only
- Meets current U-NII-1 requirements for gain and upper side lobe performance.
- Manufactured in Ireland.

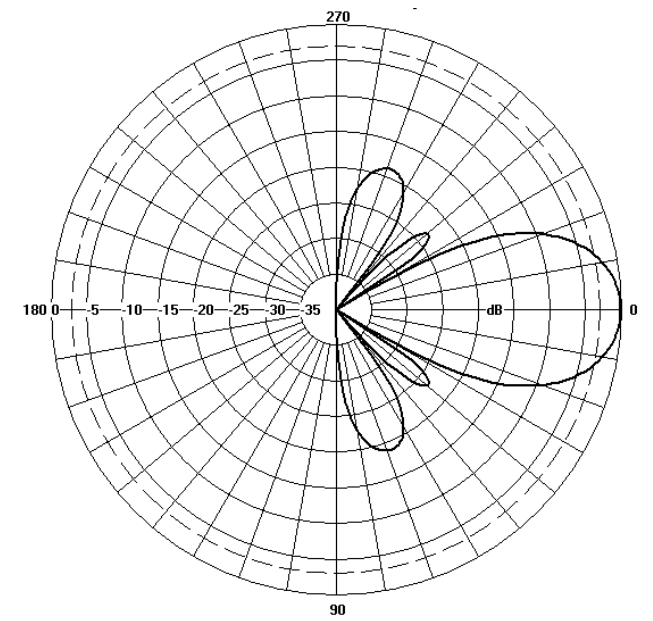
TECHNICAL SPECIFICATION

Electrical Specifications		Low Band				Mid Band				3.5/ 5.5GHz		
Frequency Range	MHz	617-686	686-755	755-824	824-894	1695-1995	1920-2170	2170-2500	2500-2690	3300-4200	5150-5925	
Polarisation		+/- 45° Slant Linear										
Gain	Basta	dB	6.7±0.5	7.1±0.5	7.4±0.5	7.7±0.5	12.1±0.5	12.6±0.5	13.1±0.5	13.5±0.5	10.5±0.5	5.5±0.5
	Max	dB	7.2	7.6	7.9	8.2	12.6	13.1	13.6	14.0	11.0	6.0
Azimuth Beamwidth	Degree	75°±8°	72°±8°	70°±7°	66°±7°	68°±7°	66°±7°	62°±7°	58°±6°	60°±6°	57°±6°	
Azimuth Beam Squint	Degree <	5°	5°	5°	5°	5°	5°	5°	5°	5°	5°	
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°	T2°-T10°	T2°-T10°	T2°-T10°	T2°-T10°	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	
Front to Back Ratio: Total Power +/-30°	dB >	25	25	25	25	27	27	27	27	25	25	
Isolation	dB>	25	25	25	25	25	25	25	25	25	25	
Passive Intermodulation	dBc <	-153	-153	-153	-153	-153	-153	-153	-153	N/A	N/A	
Cross Polar Discrimination	dB >	16	16	16	16	16	16	16	16	16	16	
Maximum Effective Power Per Port	W	100	100	100	100	250	250	250	250	50	1	

Representative Pattern Files



1695 - 2690MHz



3.5GHz / 5.5GHz

Azimuth

Elevation

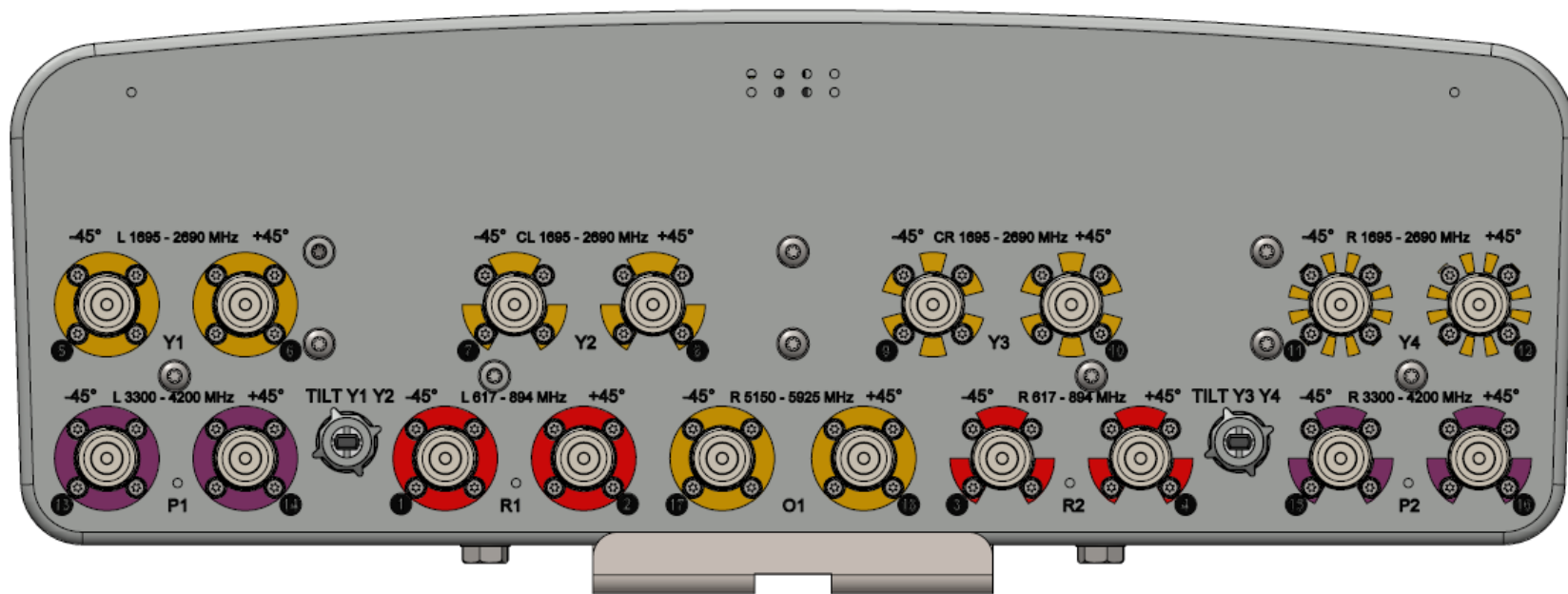
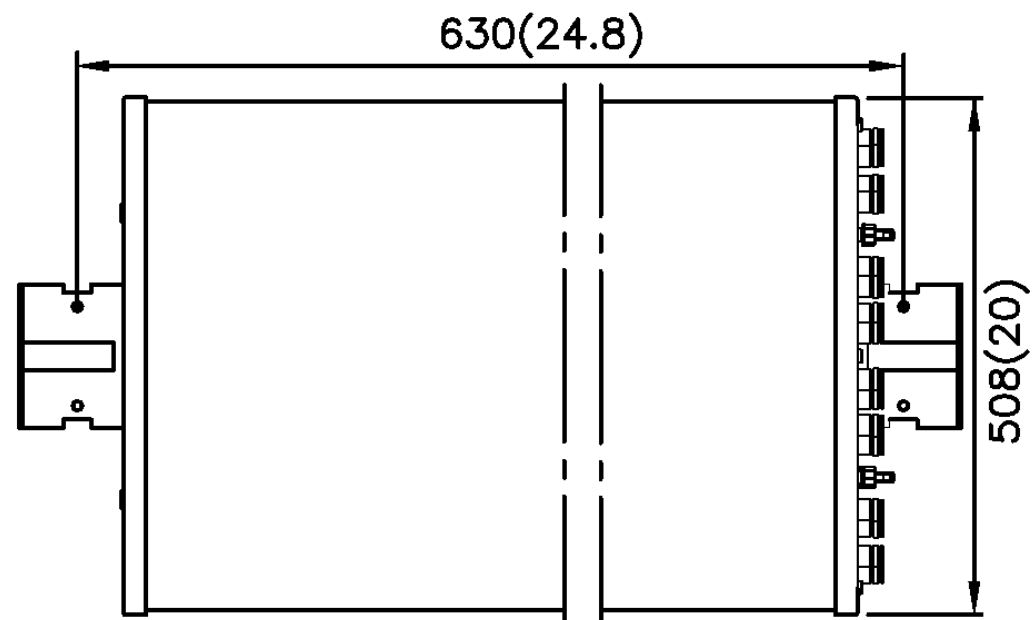
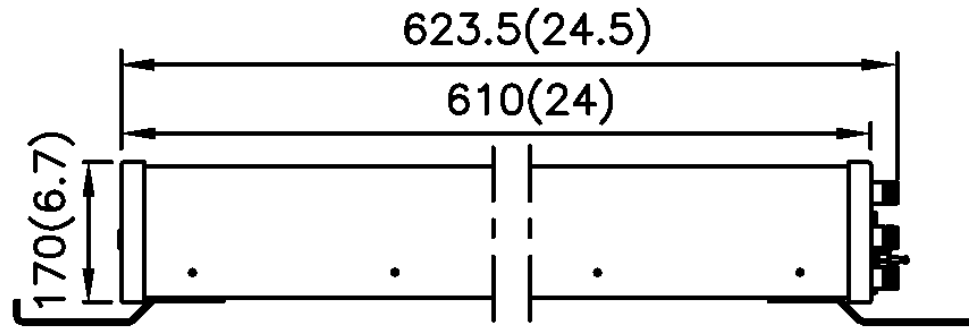
TECHNICAL SPECIFICATION

Mechanical Specifications

Dimensions	mm (in)	610 (24) x 508 (20) x 170 (6.7) -(LxWxH)
Packing Size (LxWxD)	mm (in)	770 (30.3) x 580 (22.4) x 260 (10.2)
Net Weight (antenna)	kg (lb)	10 (22)
Net Weight (mount)	kg (lb)	1.5 (3.3)
Shipping Weight	kg (lb)	11.5 (24)
Connector Type (Female)	-	4.3-10
Connector Position	-	Bottom
Connector Position Quantity	-	18 (4P Low band, 8P Mid band, 4P High band CBRS & 2P High Band LAA)
Windload Frontal (at Rated Wind Speed: 150km/h)	N (lbf)	320 (190)
Windload Lateral (at Rated Wind Speed: 150km/h)	N (lbf)	110 (70)
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)

TECHNICAL SPECIFICATION

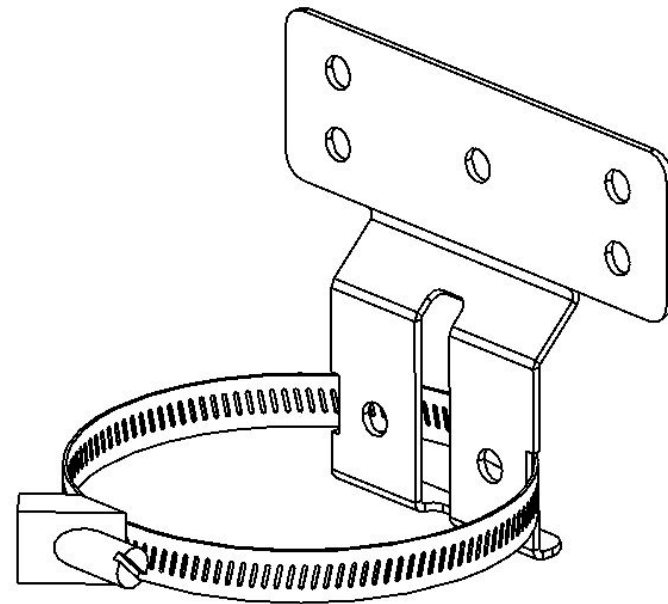
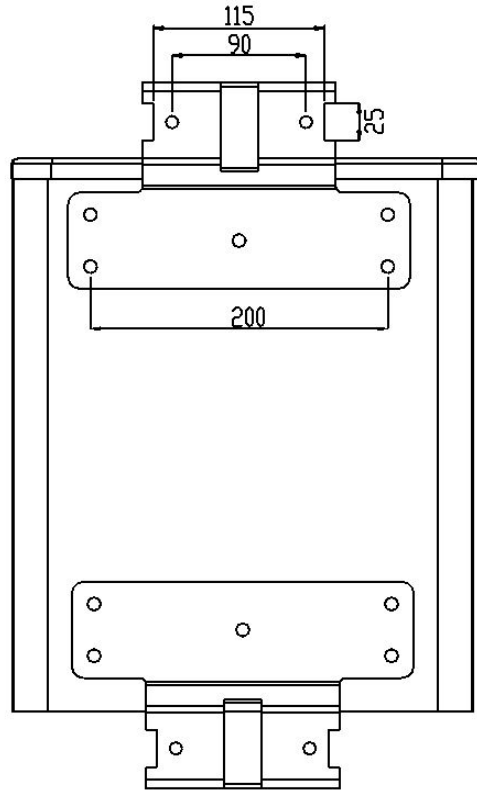
Mechanical Illustration



TECHNICAL SPECIFICATION

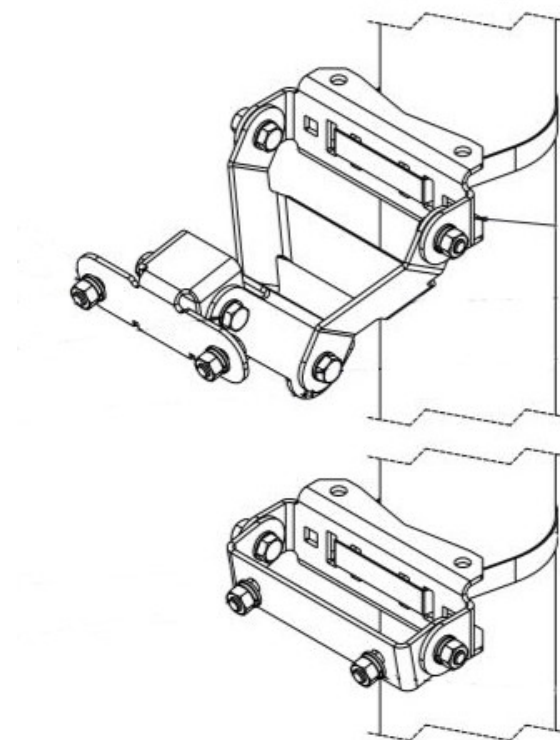
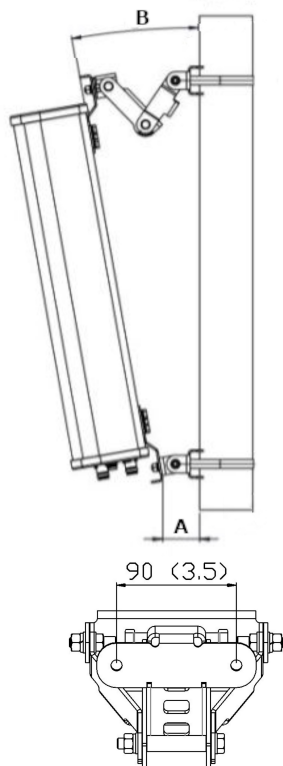
Mounting Bracket Kit

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



Mounting Kit Tilt Range	Mounting Kit Material	Mounting Kit Pole Diameter
0	Stainless Steel	Metal Band (not supplied) is chosen to suit individual pole diameter.

CL-V-156 (Adjustable Mounting Kit - Optional Accessory)



Mounting Kit Tilt Range	Mounting Kit Material	Mounting Kit Material
0° to -10°	Stainless Steel	Metal Band (not supplied) is chosen to suit individual pole diameter.

TECHNICAL SPECIFICATION

Ordering Info

Order Code - Antenna	Description
AW3724-M-F	Mechanical Electrical Tilt with 4.3-10 Connectors.
Order Code - Accessories	Description
CL-V-161	Adjustable Mount kit - Optional Accessory
AW1012-2-FM-FM	RF Jumper Cable, connector types 4.3-10 (m) / 4.3-10 (m), length 2 metres (6'6")
AW1012-2-FM-NM	RF Jumper Cable, connector types 4.3-10 (m) / N-Type (m), length 2 metres (6'6")
AW1014-2-FM-TM	RF Jumper Cable, connector types 4.3-10 (m) / Nex10 (m), length 2 metres (6'6")

Enquiries

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

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

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