



AW3933-E-F

Common Name 8 Port, (4P/4P) 1.8M Multiband Panel 65°

Frequency	Ports	Tilt	Gain	Beamwidth
617-698MHz	4	eRET	12.9	65°
3300-4000MHz	4	eRET	17.5	65°

PRODUCT INFORMATION

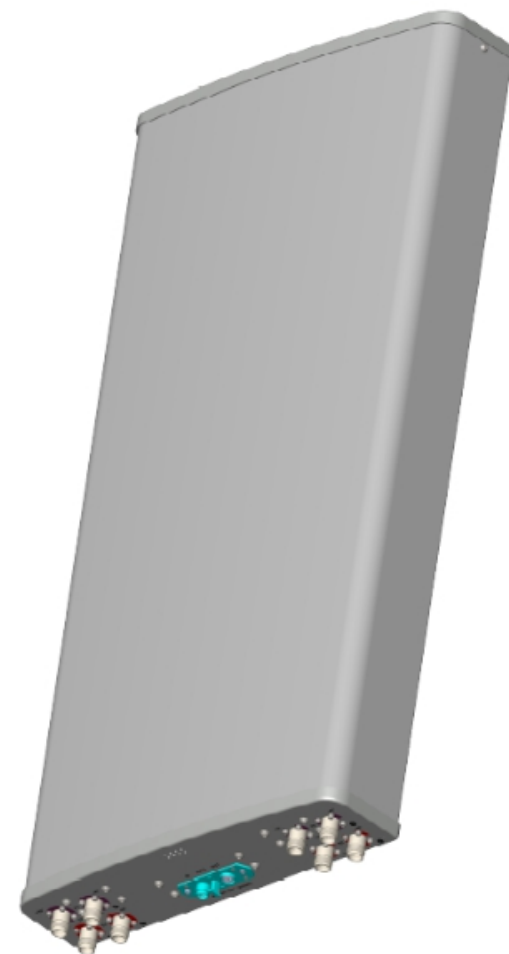
This multiband panel antenna is 600MHz and C Band ready and has four Low Band ports and four High Band ports. Remote Electrical tilt is independent for each band and allows tilt optimisation to improve coverage and throughput. The antenna is designed for compact, aesthetically pleasing applications.

APPLICATION

Alpha Wireless panel antennas provide wireless network operators the highest performance and quality. Panel antennas are generally used in sectorized applications. These antennas are designed for optimal radiation patterns improving overall network performance. A horizontally spaced array provides enhance MIMO performance with full 4x4 operation for receive diversity RF functions.

STANDARD & CERTIFICATIONS

Certification	BS EN ISO 9001:2015
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FEATURES

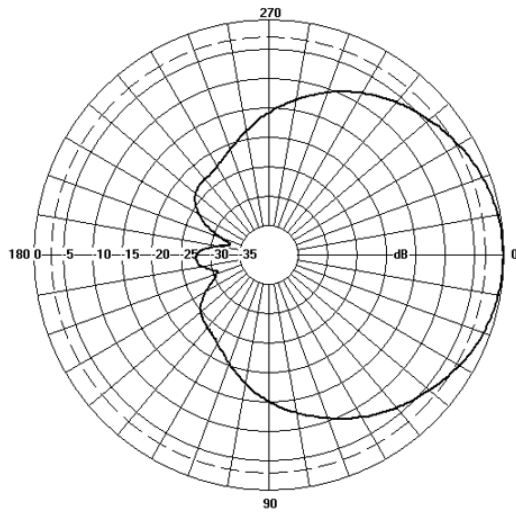
- Ultra-wide dual-band antenna
- Supports 600MHz Digital Dividend (n71) and 3.5GHz C Band (n77 and n78)
- 4x4 MIMO for maximum throughput
- Remote Electrical Tilt controlling High and Low Band
- RET is AISG 2.0 compatible.

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

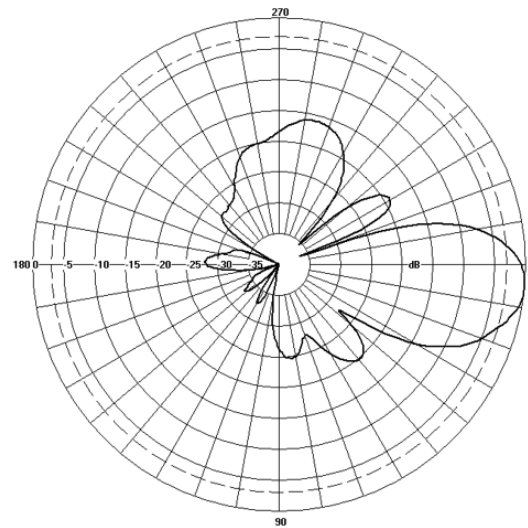
TECHNICAL SPECIFICATION

Electrical Specifications								
Frequency Range	MHz	617-644	644-671	671-698	3300-3500	3500-3800	3800-4000	
Polarisation	Degree	+/- 45° Slant Linear						
Gain	Basta	dBi	12.3±0.5	12.4±0.5	12.4±0.5	17.0±0.5	17.0±0.5	17.2±0.5
	Max	dBi	12.8	12.9	12.9	17.5	17.5	17.7
Azimuth Beamwidth	Degree	65°±5	65°±5	65°±5	65°±5	65°±5	65°±5	65°±5
Azimuth Beam Squint	Degree<	5°	5°	5°	5°	5°	5°	5°
Elevation Beamwidth	Degree	22.5°±1.0	22°±1.0	21.5°±1.0	7.3°±0.5	7.0°±0.5	6.5°±0.5	
Electrical Downtilt	Degree	T8°-T16°	T8°-T16°	T8°-T16°	T0°-T10°	T0°-T10°	T0°-T10°	
Electrical Downtilt Deviation	Degree<	2°	2°	2°	1°	1°	1°	
Impedance	Ohms	50						
VSWR	<	1.5						
Return Loss	dB>	14						
Isolation	dB>	25	25	25	25	25	25	25
Front to Back Ratio: Total Power +/-30°	dB>	21	21	21	25	25	25	25
Passive Intermodulation	dBc<	150	150	150	N/A	N/A	N/A	N/A
Upper Sidelobe Suppression, Peak to 20°	dB>	N/A	N/A	N/A	18	18	18	18
Cross-Polar Discrimination (0°)	dB>	15	15	15	15	15	15	15
Maximum Effective Power Per Port	W	300	300	300	150	150	150	150

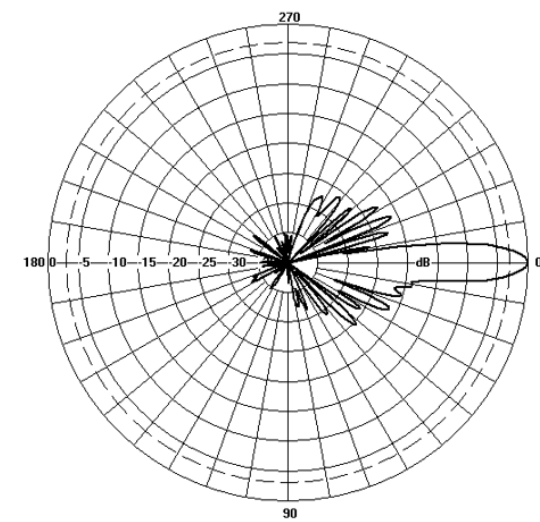
Representative Pattern Files



Azimuth



Low Band



High Band

Elevation

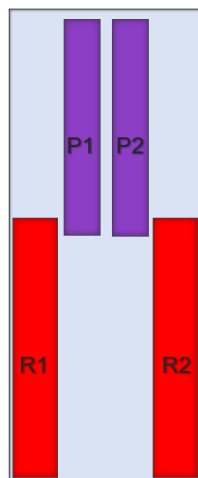
For radiation pattern files, please login at www.alphawireless.com

TECHNICAL SPECIFICATION

Mechanical Specifications

Dimensions	mm (in)	1825 (71.8) x 565 (22.2) x 165 (6.5)
Packing Size (LxWxD)	mm (in)	1975 (77.8) x 620 (24.4) x 250 (9.8)
Net Weight (antenna)	kg (lb)	27.5 (60.5)
Net Weight (mount)	kg (lb)	5.2 (11.5)
Shipping Weight	kg (lb)	32.7 (72.0)
Connector Type (Female)	-	4.3-10
Connector Position	-	Bottom
Connector Quantity	-	8 (4P Mid band, 4P High Band)
Windload Frontal (at Rated Wind Speed: 150km/h)	N	1066 (240)
Windload Lateral (at Rated Wind Speed: 150km/h)	N	384 (87)
Survival Wind Speed	km/h (mph)	200 (125)
Radome Material	-	Fibreglass
Radome Colour	-	Grey
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

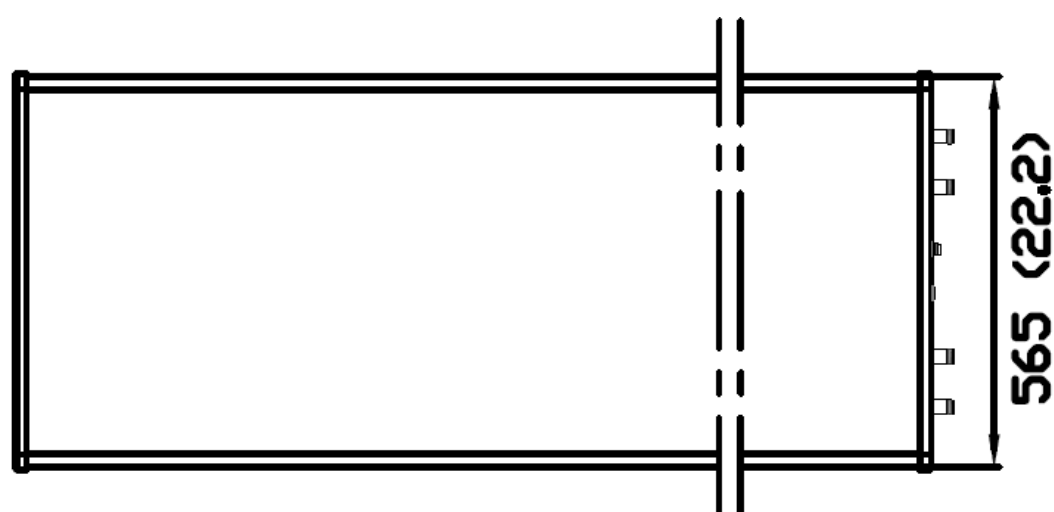
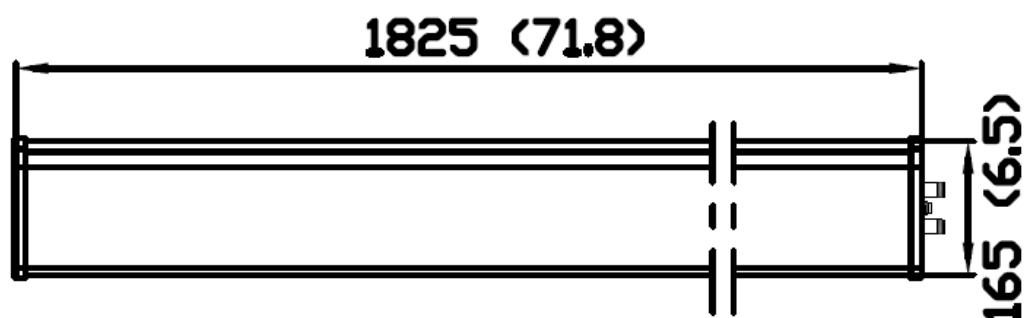
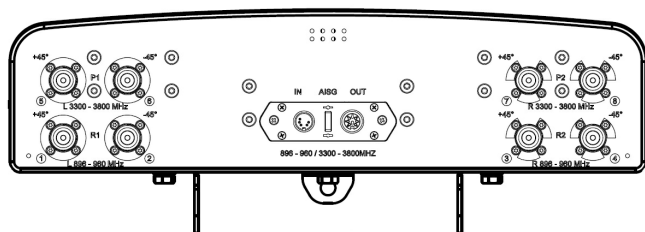


Note: Coloured box sizes do not represent antenna sizes.

Array	Frequency MHz	Ports	RET ID
R1	617 - 698	1 - 2	1
R2	617 - 698	3 - 4	1
P1	3300 - 4000	5 - 6	2
P2	3300 - 4000	7 - 8	2

Configuration	
617-698 MHz	One RET for both arrays: R1, R2
3300-4000 MHz	One RET for both arrays: P1, P2
Total Quantity	Two RET Motor Controllers
Location and Interface	
RET Controller Location	Inside antenna radome housing
RET Interface	Pair of AISG 8 Pin DIN connectors, one male, one female
RET Interface Quantity	One pair of AISG 8 Pin DIN connectors
RET Interface Location	On connector plate located at bottom of antenna
Electrical	
Input Voltage	10 - 30V
Power Idle Mode	< 1W
Power Active Mode	< 10W
Protocol	3GPP / AISG 2.0

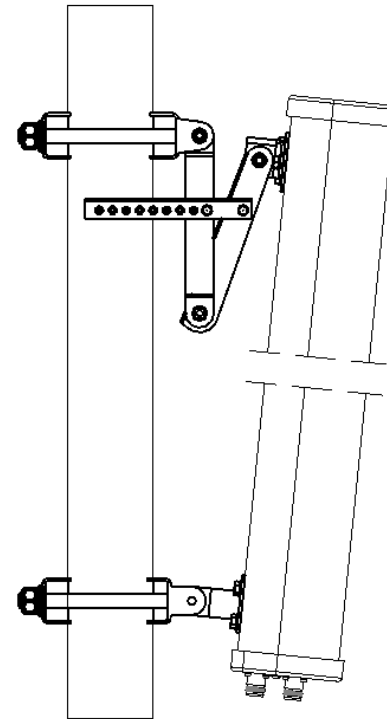
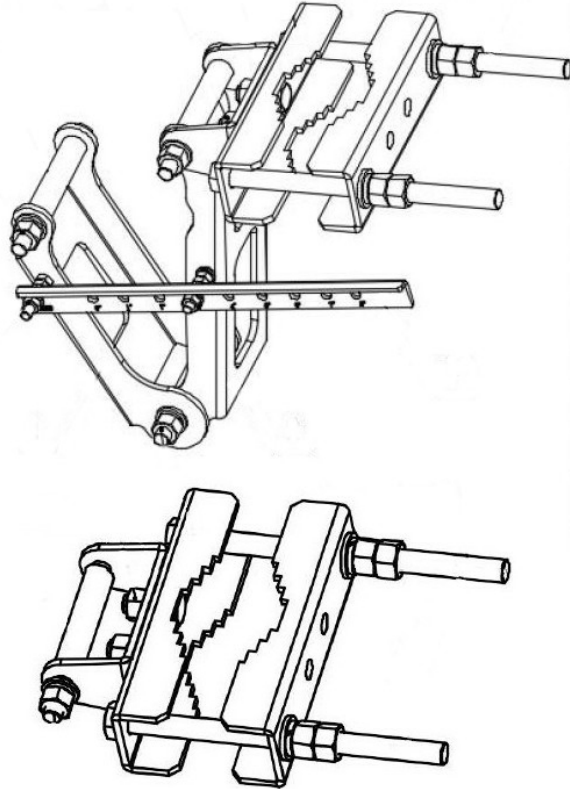
Mechanical Illustration



TECHNICAL SPECIFICATION

Mounting Bracket Kit

CL-V-164 Adjustable Mount Kit (Mount Kit included with antenna)



Ordering Info

Order Code - Antenna

AW3933-E-F

Order Code - Accessories

AW1012-2-FM-FM

AW1012-2-FM-NM

AW1014-2-FM-TM

PADC 1000

SADC 2000

AW0326-3-PM-PF

AW0326-10-PM-PF

AW0326-25-PM-PF

AW0326-50-PM-PF

Description

Enclosed Remote Electrical Tilt (eRET) 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")

Portable AISG Controller

Site AISG Controller

AISG Jumper Cable Lengths 3 metres (9' 10")

AISG Jumper Cable Lengths 10 metres (32' 9")

AISG Jumper Cable Lengths 25 metres (82')

AISG Jumper Cable Lengths 50 metres (164')

Enquiries

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