



# AWL3964-T0-C

**Common Name** 16 Port (8P/8P) Multiband Omni Antenna

1695-2690MHz	8	Fixed	8.0	360°
3300-4200MHz	8	Fixed	9.1	360°
Frequency	Ports	Tilt	Gain	Beamwidth

## PRODUCT INFORMATION

The AWL3964-T0-C is a 16-port multiband omnidirectional canister antenna that provides 360° of horizontal coverage. This canister antenna has eight ports for 1695 – 2690 MHz (including n77) and eight ports for mid band 3300 – 4200 MHz (including n78) ports which is housed in an ultra-compact 0.4 meter radome. This antenna is a visually appealing solution to deliver 4G and 5G services for high-capacity venues, hot spots, and urban environments. The AWL3964-T0-C omni antenna makes efficient use of limited real estate by supporting multiple operators across dual frequency bands with 4x4 MIMO for maximum throughput. This antenna provides a strong signal to noise ratio throughout the entire small cell which is afforded through its wide elevation beamwidth, high gain, and minimal azimuth pattern ripple.

## APPLICATION

Alpha Wireless multi-band small cell provides omni coverage whilst in an ultra-compact radome design. This antenna provides multiple ports for ultimate data throughput in 4G and 5G applications. The antenna is designed to be installed in an urban environment where low visual impact is required.

## STANDARD & CERTIFICATIONS

Certification	BS EN ISO 9001:2015
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## FEATURES

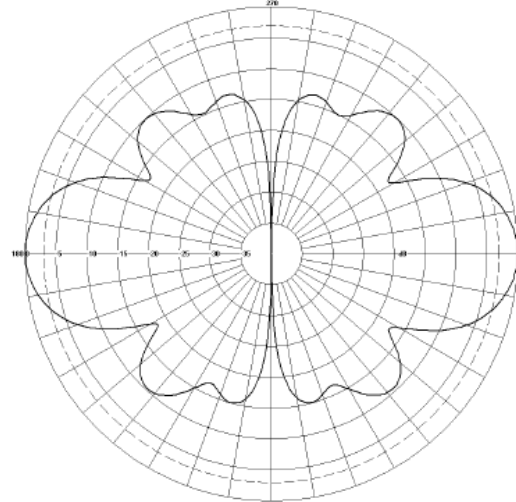
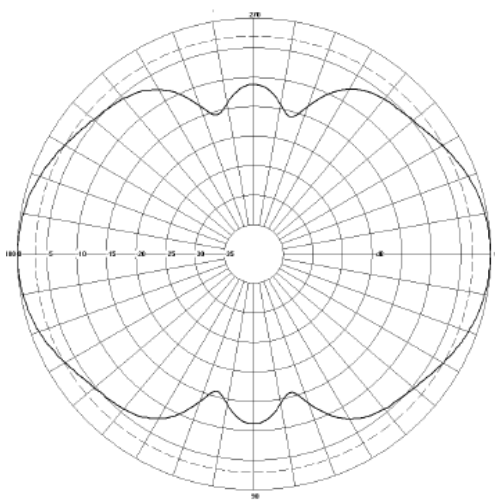
- Allows 4x4 MIMO on dual bands for multiple operators
- Minimal nulls in the azimuth pattern for consistent azimuth coverage
- Eight ports for 1695 – 2690 MHz (including n77)
- Eight ports for mid band 3300 – 4200 MHz (including n78)
- Pole-top and side-arm mounting options
- High port count enabling multiple operators
- Compact design - Low visual impact.

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

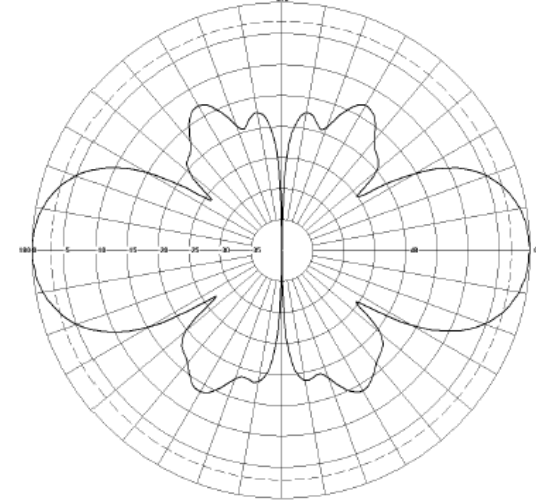
## TECHNICAL SPECIFICATION

Electrical Specifications								
Frequency Range		MHz	1695-1995	1920-2170	2170-2500	2500-2690	3300-3600	3600-4200
Polarisation		Degree	+/- 45° Slant Linear					
Gain	Basta	dBi	6.0±0.5	6.5±0.5	6.9±0.5	7.5±0.5	8.5±0.5	8.6±0.5
	Max	dBi	6.5	7.0	7.4	8.0	9.0	9.1
Azimuth Beamwidth		Degree	360°	360°	360°	360°	360°	360°
Elevation Beamwidth		Degree	40°	38°	32°	30°	31°	30°
Electrical Downtilt		Degree	T0°	T0°	T0°	T0°	T0°	T0°
Electrical Downtilt Deviation		Degree<	3°	3°	3°	3°	3°	3°
Impedance		Ohms	50					
VSWR		<	1.5					
Return Loss		dB>	14					
Isolation		dB>	25	25	25	25	25	25
Passive Intermodulation		dBc<	-150	-150	-150	-150	N/A	N/A
Cross-Polar Discrimination (0°)		dB>	10	10	10	10	10	10
Maximum Effective Power Per Port		W	50	50	50	50	50	50

## Representative Pattern Files



1695- 2690MHz



3300 - 4200MHz

Azimuth

Elevation

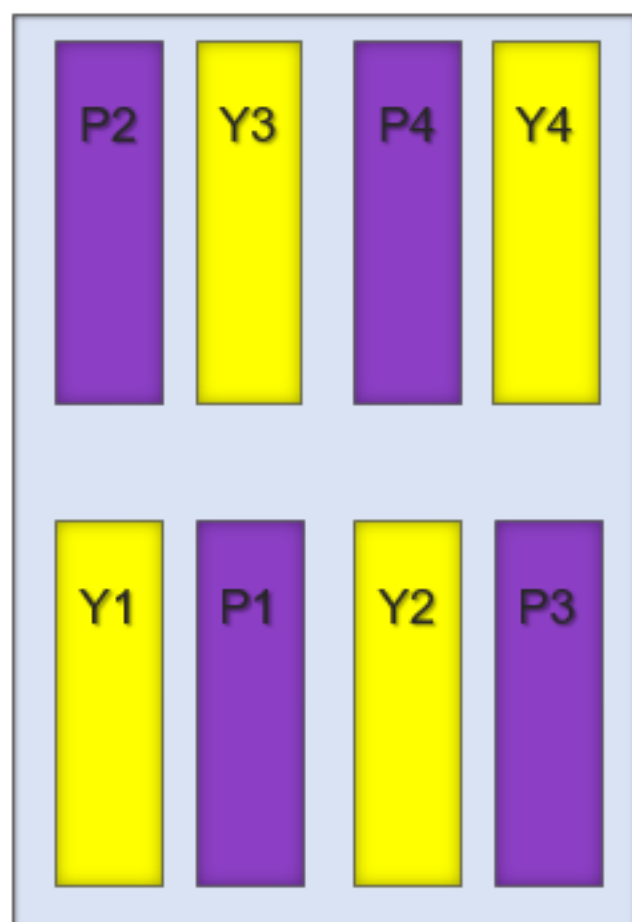
For radiation pattern files, please login at [www.alphawireless.com](http://www.alphawireless.com)

## TECHNICAL SPECIFICATION

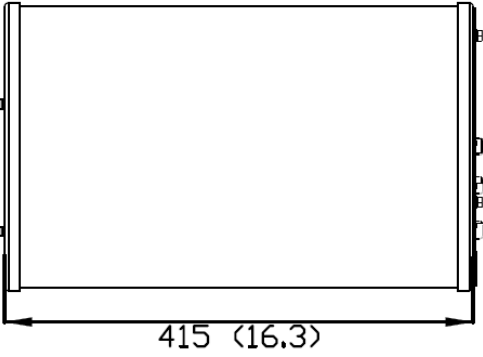
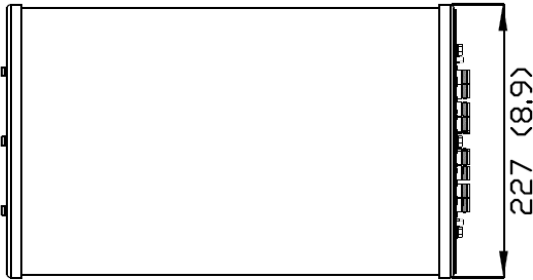
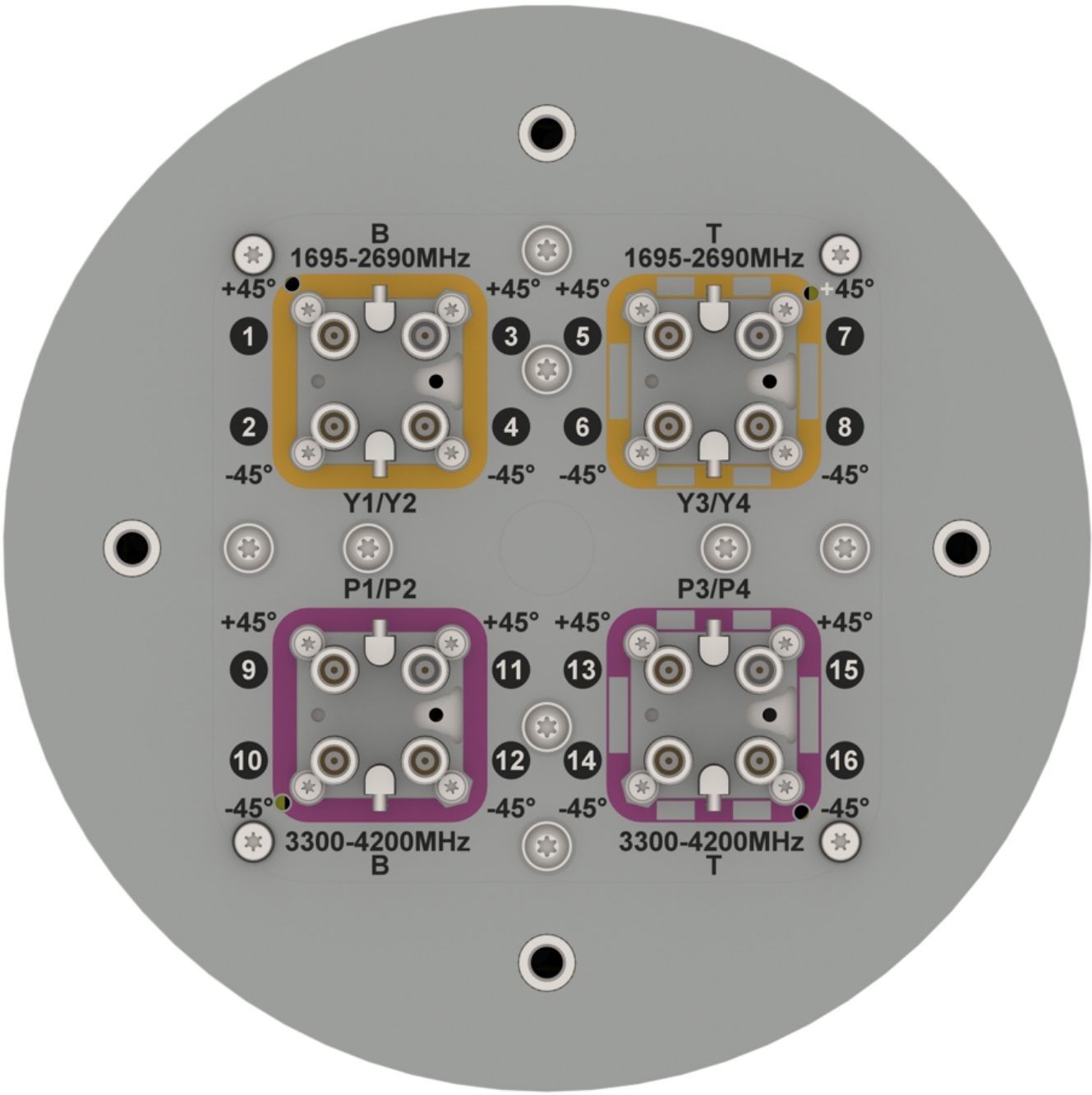
### Mechanical Specifications

Dimensions (LxWxD)	mm (in)	415 (16.3) x 227 (8.9) - Antenna
Net Weight (antenna)	kg (lb)	4.3 (9.5)
Net Weight (mount)	kg (lb)	3.8 (8.4)
Shipping Weight	kg (lb)	8.1 (12.5)
Connector Type (Female)	-	M-LOC
Connector Position	-	Bottom
Connector Quantity	-	16
8 Ports Mid Band, 8 Ports High Band.		
Windload Frontal (at Rated Wind Speed: 150km/h)	N	68 (15)
Windload Lateral (at Rated Wind Speed: 150km/h)	N	68 (15)
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	Ports
Y1	1695 – 2690 MHz	1 – 2
Y2		3 – 4
Y3		5 – 6
Y4		7 – 8
P1	3300 – 4200 MHz	9 - 10
P2		11 - 12
P3		13 - 14
P4		15 - 16

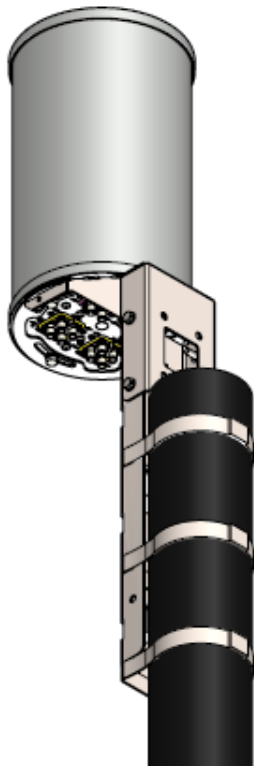




AWL3964-T0-C

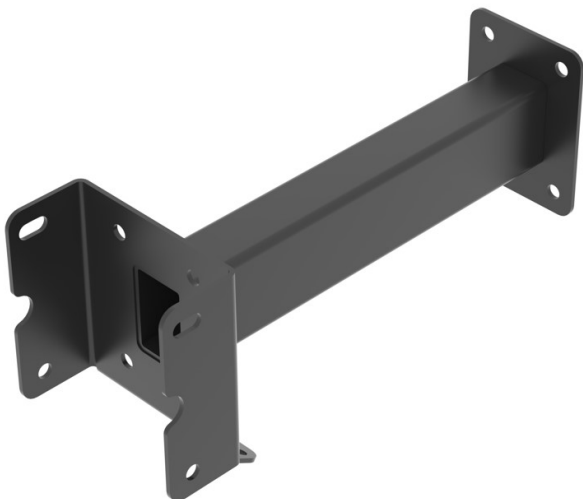
Mounting Bracket Kit

CL-V-205 Pole Mount Bracket. Included with antenna. Note: Pole Mount Straps are not included with the antenna.



Mounting Kit Tilt Range	Mounting Kit Material	Mounting Kit Pole Diameter
N/A	Galvanized Steel	76mm-127mm (3" to 5")

CL-V-211-BL Horizontal Extension Arm for CL-V-205, black. Note: Not included with antenna, must be ordered separately.



Mounting Kit Tilt Range	Mounting Kit Material	Mounting Kit Pole Diameter
0° to -10°	Black Powder Coated Mild Steel	N/A



## TECHNICAL SPECIFICATION

AWL3964-T0-C

## Ordering Info

## Order Code - Antenna

AWL3964-T0-C

## 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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