



# DATASHEET

## AW3802-T2-H-6G

**Common Name-** 8 Port, (4/4) 25", 65° Dual Panel with 60° Azimuth separation

5700-6875 MHz	8	Fixed	18.0	65°
Frequency	Ports	Tilt	Gain	Beamwidth

### PRODUCT INFORMATION

The AW3802-T2-H-6G is an 8 port sector antenna that has been designed to accommodate two ePMP 3000 or two ePMP 4000 Cambium Radios. It consists of two 4 port sector antennas orientated with 60° azimuth separation. This antenna has a pleasing compact housing and offers one mounting fixture on the tower which replaces two individual sector antennas, reducing tower loading and rental fees. On the back of the antenna housing there is a sturdy mounting fixture and a covered hood for the two Cambium radios, simplifying installation and protecting the radio and connectors from rain and snow.

AW3802 has 8 ports located on the back of the antenna which feed the two 4 port sectors. Radio A is connected to Sector A ports 1 - 4. Radio B is connected to Sector B ports 5 - 8. Sectors A and B are orientated with 60° Azimuth separation.

Product covers the following frequency bands:

- U-NII - 3 - (5.725 - 5.850GHz)
- U-NII - 4 - (5.850 - 5.925GHz)
- U-NII - 5 - (5.925 - 6.425GHz)
- U-NII - 6 - (6.425 - 6.525GHz)
- U-NII - 7 - (6.525 - 6.875GHz)

### APPLICATION

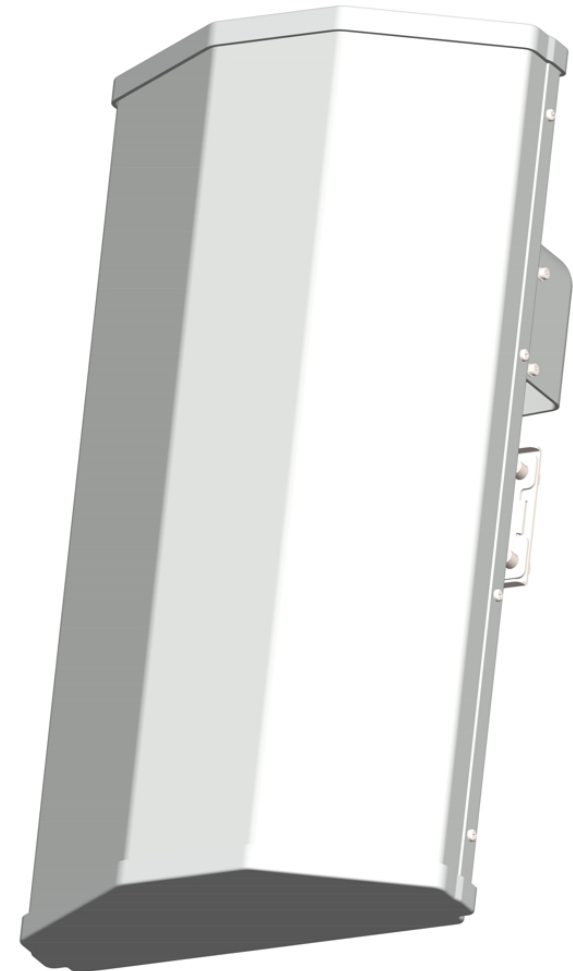
The AW3802 has been designed for a six sector site application. Each AW3802 houses two sectors with 60° Azimuth separation that allows four port radios to be connected to each sector. Using two radios with one AW3802 antenna allows for 120° of coverage. Three AW3802 antennas positioned at 120° Azimuth separation results in 360° Azimuth coverage with six sectors positioned every 60°. This antenna is optimized for channel-reuse three.

### 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.*



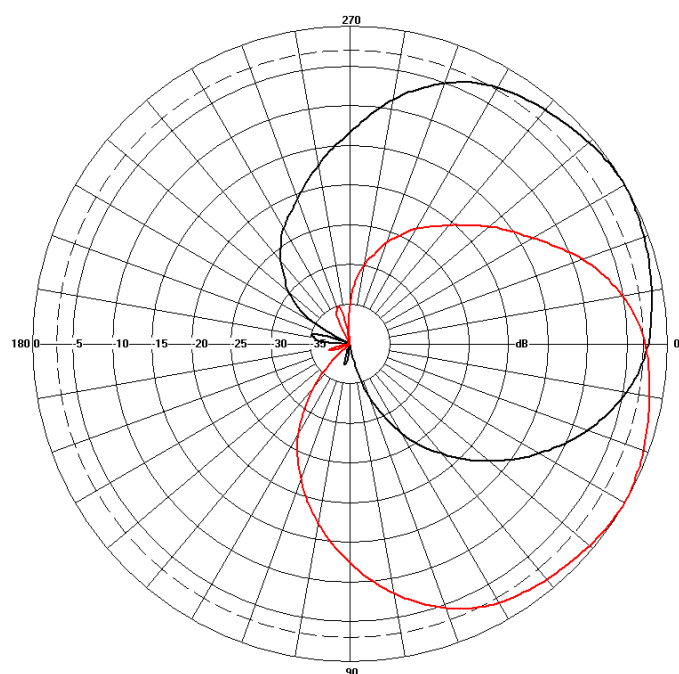
### FEATURES

- Covers U-NII 3,4, 5, 6, 7 Bands between 5.700 - 6.875GHz
- Two 4 port sectors orientated at 60° Azimuth separation
- Mounting points on back of antenna for two ePMP Cambium Radios.
- Mounting can accommodate either two ePMP 3000 or two ePMP 4000 Cambium Radios
- Horizontal and Vertical antenna polarisation for use with the PMP3000 or ePMP 4000.
- Reverse Polarity SMA Port Connectors.
- Compact form factor at 25" height and 12" width that occupies minimal tower space
- Optimized for MU-MIMO and maximum throughput
- Mounting bracket with variable elevation tilt (included) and external GPS antenna fixture
- Allows rapid replacement of radio after antenna has been mounted to pole.

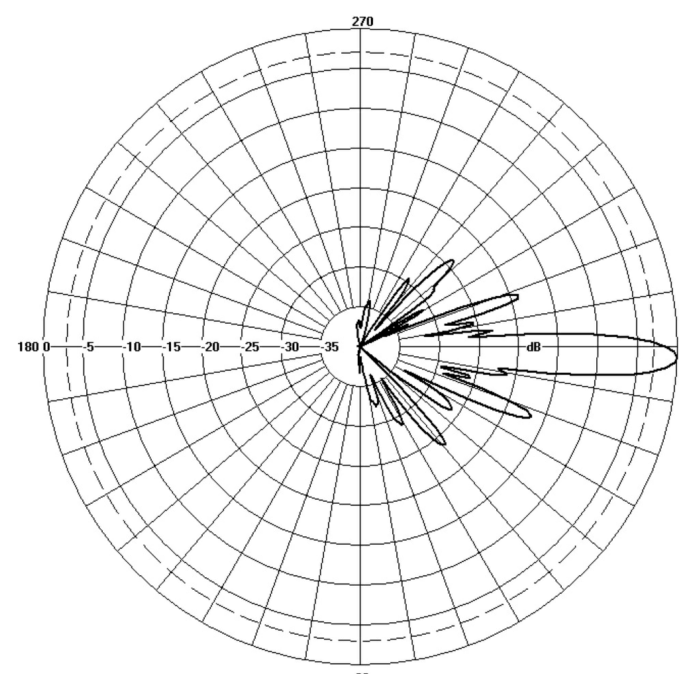
## TECHNICAL SPECIFICATION

Electrical Specifications					
Frequency Range		MHz	5700 - 5925	5925-6525	6525-6875
Polarisation		Degree	H & V		
Gain	Basta	dBi	16.8±0.5	17.4±0.5	17.6±0.5
	Max	dBi	17.3	17.9	18.1
Azimuth Beamwidth		Degree	65°	63°	64°
Azimuth Beam Squint		Degree<	3°	3°	3°
Elevation Beamwidth		Degree	6.0°	5.5°	5.5°
Electrical Downtilt		Degree	T2°	T2°	T2°
Electrical Downtilt Deviation		Degree<	1°	1°	1°
Impedance		Ohms	50	50	50
VSWR		<	1.5	1.5	1.9
Return Loss		dB>	14	14	10
Isolation		dB>	25	25	23
Front to Back Ratio: Total Power +/-30°		dB>	27	27	27
Upper Sidelobe Suppression, Peak to 20°		dB>	14	15	15
Cross-Polar Discrimination		dB>	16	17	18
Maximum Effective Power Per Port		W	50	50	50

## Representative Pattern Files



Azimuth



Elevation

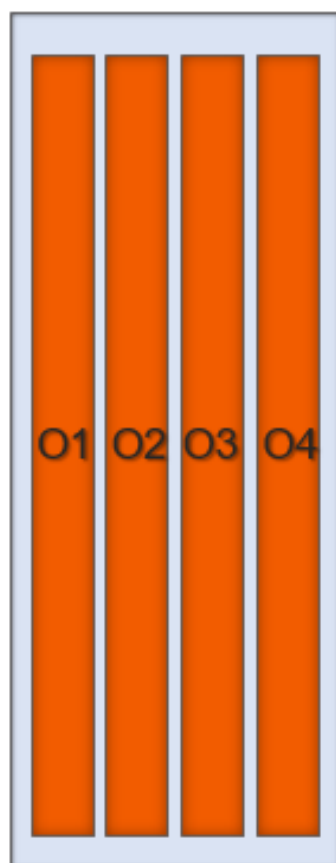
For radiation pattern files, please login at [www.alphawireless.com](http://www.alphawireless.com)

## TECHNICAL SPECIFICATION

## Mechanical Specifications

Dimensions	mm (in)	630 (24.8) x 322 (12.7) x 115 (4.5) - (LxWxD)
Packing Size (LxWxD)	mm (in)	765 (30.1) x 375 (14.7) x 250 (9.8) -(LxWxH)
Net Weight (antenna)	kg (lb)	8 (17.6)
Net Weight (mount)	kg (lb)	3.1 (6.8)
Shipping Weight	kg (lb)	12.1 (26.5)
Connector Type (Female)	-	RP-SMA
Connector Quantity	-	8
Connector Position	-	Rear
Windload Frontal (at Rated Wind Speed: 150km/h)	N (lbf)	210 (47)
Windload Lateral (at Rated Wind Speed: 150km/h)	N (lbf)	75 (17)
Survival Wind Speed	km/h (mph)	200 (125)
Radome Material	-	ASA capped ABS
Radome Colour	RAL	7035 ( light grey )
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

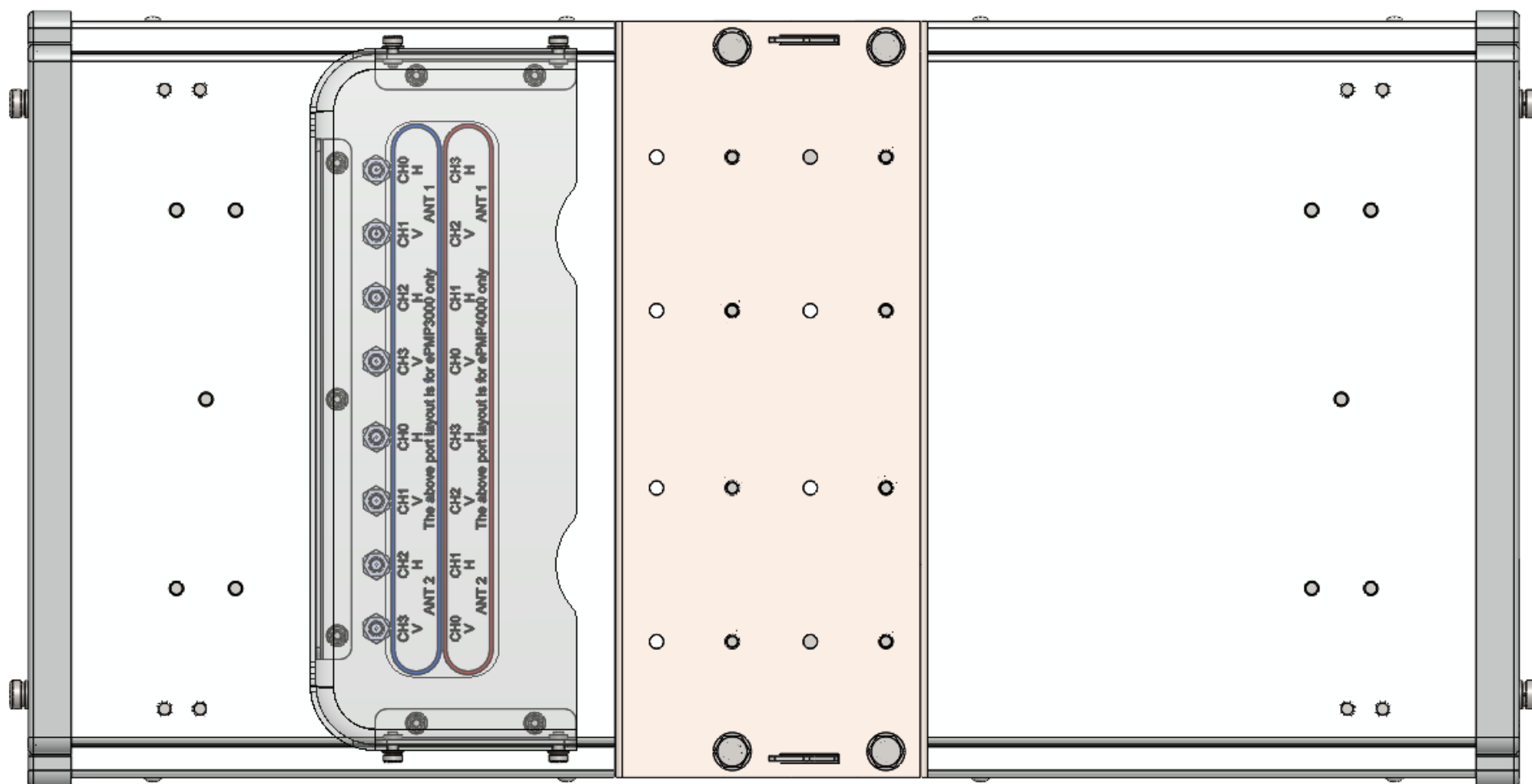
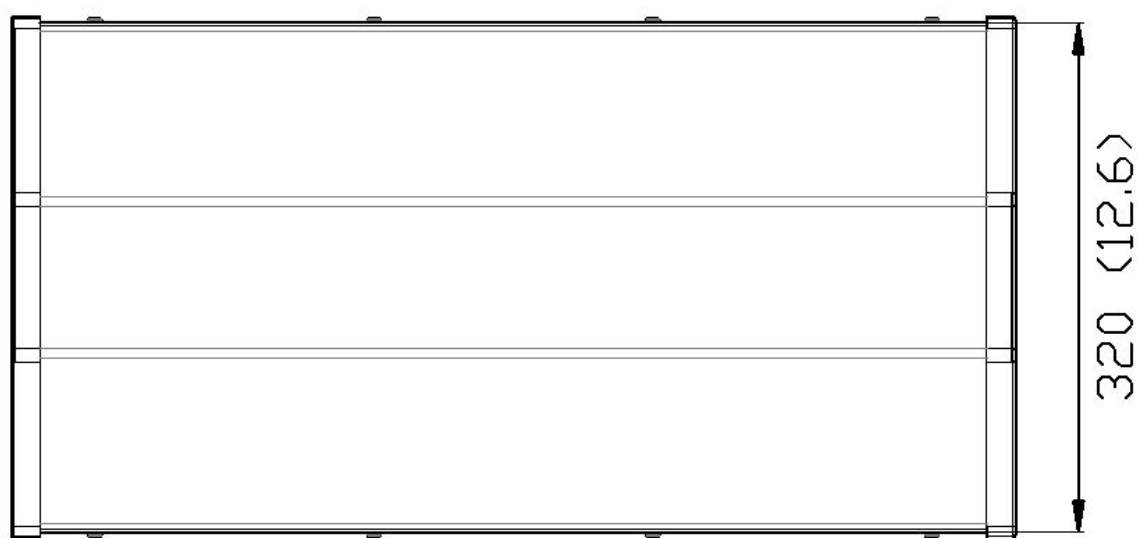
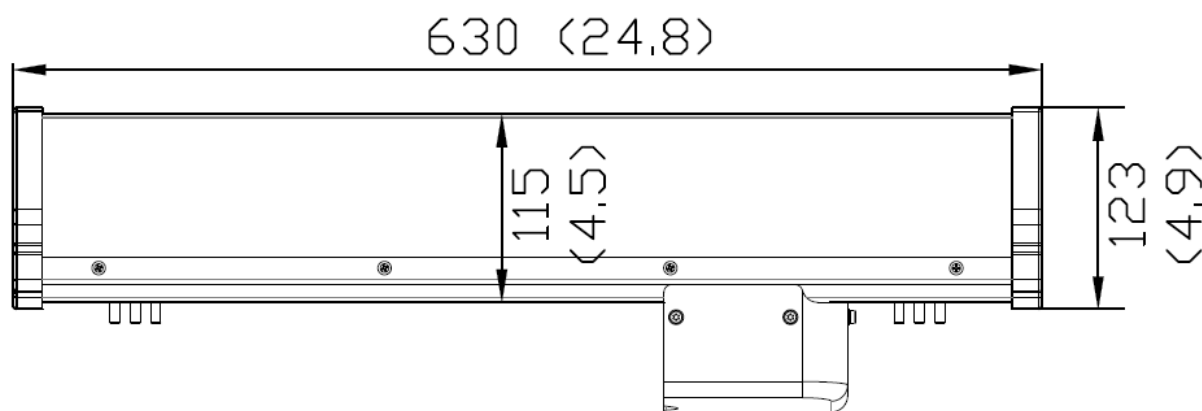
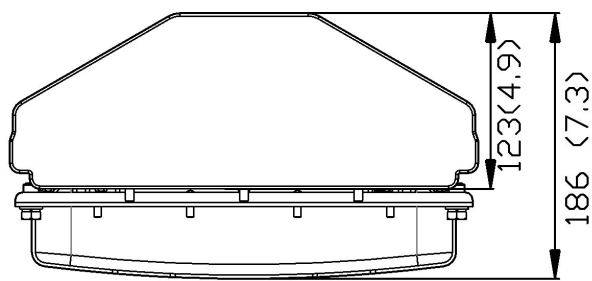


Array	Frequency MHz	Ports
O1	5700-6875	1 - 2
O2	5700-6875	3 - 4
O3	5700-6875	5 - 6
O4	5700-6875	7 - 8

*Note: Coloured box sizes do not represent antenna sizes.*

Mechanical Illustration

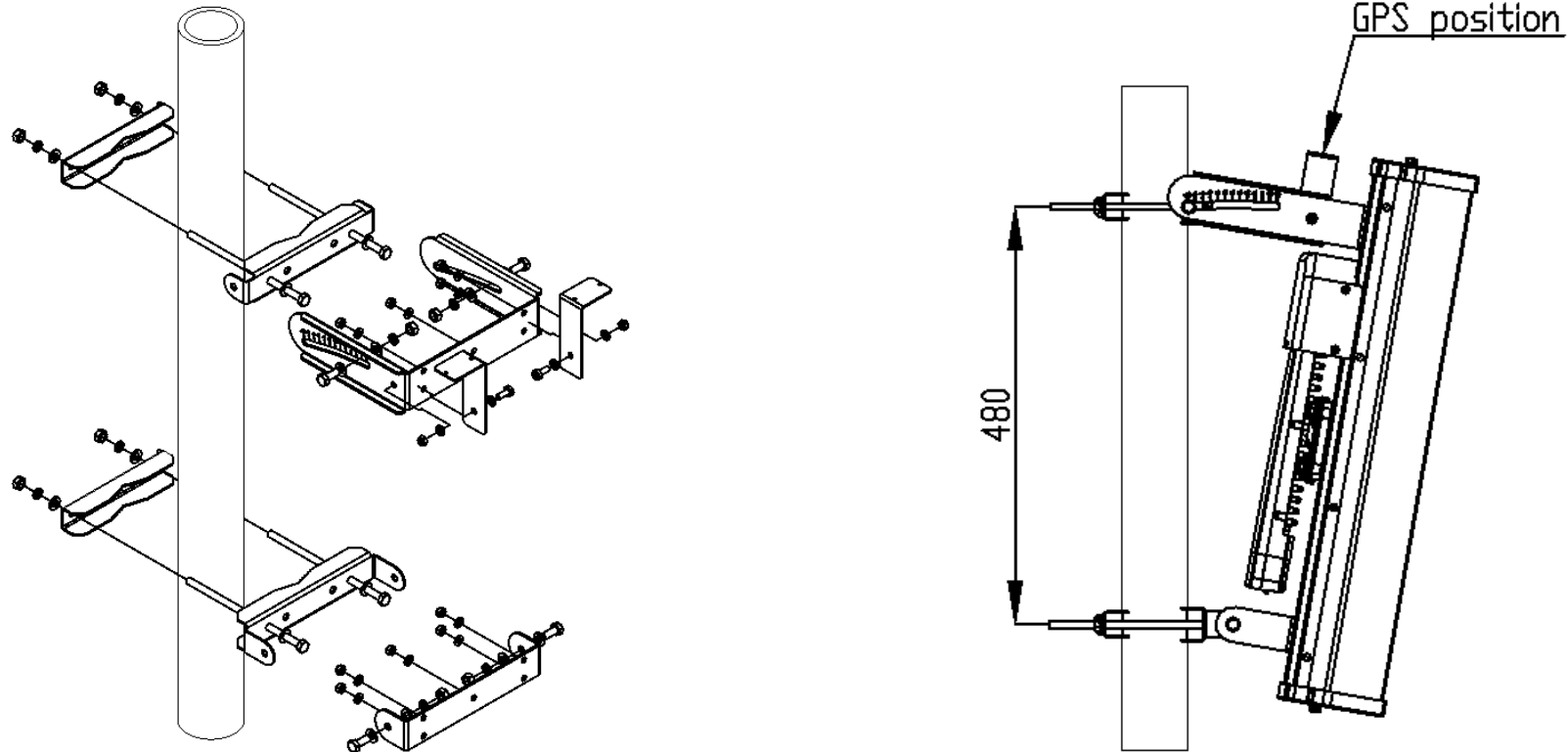
All measurements are in mm (in)



## TECHNICAL SPECIFICATION

### Mounting Bracket Kit

CL-V-160 Mount Kit (Mount Kit included with antenna)



Mounting Kit Tilt Range	Mounting Kit Material	Mounting Kit Diameter
+2° to -10°	Stainless Steel	50mm-115mm (2" to 4.5")

### Ordering Info

**Order Code - Antenna**  
AW3802-T2-H-6G

**Description**  
Two Degrees Fixed Tilt with RP-SMA Connectors.

### Enquiries

**Global Headquarters**  
Ashgrove Business Centre,  
Ballybrittas, Portlaoise,  
R32 DT0A, IRELAND  
[sales@alphawireless.com](mailto:sales@alphawireless.com)  
+353 57 86 33847

**North America**  
7301 W. 129th Street, Suite 150,  
Overland Park,  
KS 66213, USA  
[sales@alphawireless.com](mailto:sales@alphawireless.com)  
+1 913 279 0008

**Australia**  
3/76 Regentville Rd,  
Jamisontown,  
NSW 2750, AUSTRALIA  
[sales@alphawireless.com](mailto:sales@alphawireless.com)  
+ 61 2 4504 8212

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