



## AW3780-E-F

**Common Name** 12 Port, (6P/6P), 1.8M, AltaFlex, Mid Band & High Band Tri-Sector

1452-2400MHz	6	eRET	17.1	65°
1710-2690MHz	6	eRET	17.8	65°
Frequency	Ports	Tilt	Gain	Beamwidth

## PRODUCT INFORMATION

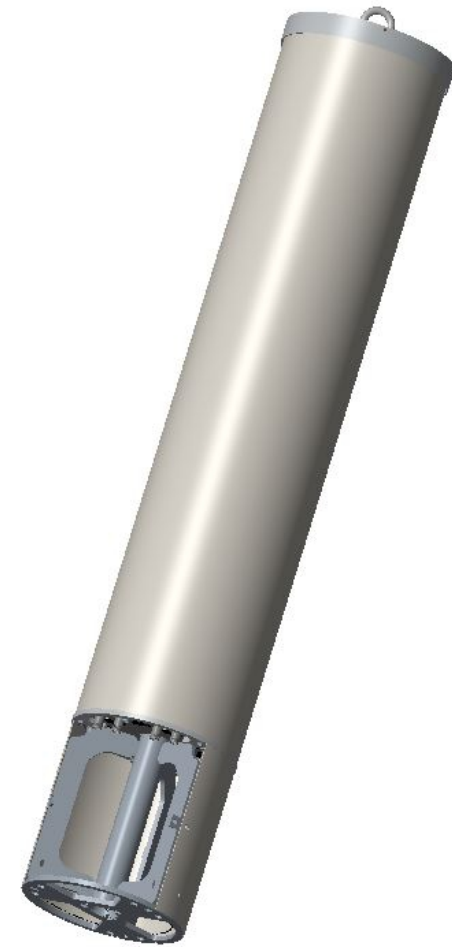
This antenna solution is being deployed on roofs and macro pole applications globally. It is a multi-frequency solution. Designed for compact, aesthetically pleasing applications.

## APPLICATION

Canisters support multiple antennas into one attractive package. These canisters deliver an elegant macro solutions for pole-top, rooftop and streetworks applications. Alpha Wireless produces the highest performance, smallest diameter canister in the marketplace. This AltaFlex canister houses both high and mid band Tri-sector antennas.

## STANDARD & CERTIFICATIONS

Certification	BS EN ISO 9001:2015
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## FEATURES

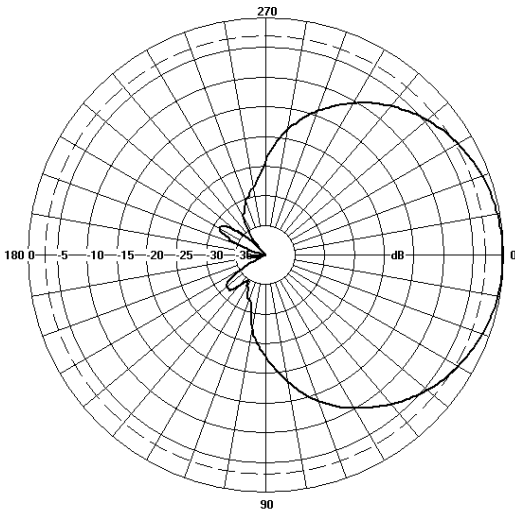
- Multi-band Tri-Sector antenna - 1452-2400/1710-2690MHz
- Low PIM performance to reduce interference
- Independent tilt on each band
- Flange mount design

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

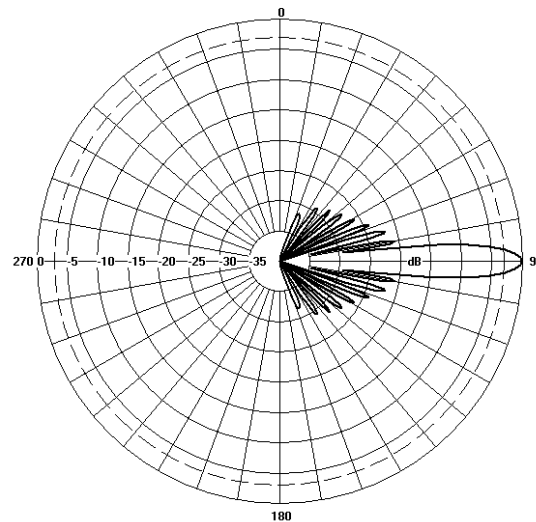
## TECHNICAL SPECIFICATION

Electrical Specifications							
Frequency Range	MHz	1452-1492	1710-2170	2300-2400	1710-1920	1920-2170	2300 - 2690
Polarisation	Degree	+/-45° Slant Linear					
Gain							
Basta	dBi	16.0±0.5	16.7±0.5	16.6±0.5	16.8±0.5	17.1±0.5	17.3±0.5
Max	dBi	16.5	17.2	17.1	17.3	17.6	17.8
Azimuth Beamwidth	Degree	75°	68°	68°	69°	64°	60°
Azimuth Beam Squint	Degree<	3°					
Elevation Beamwidth	Degree	7°	6.3°	6.2°	6.5°	6.2°	6.0°
Electrical Downtilt	Degree	T2° - T10°			T0° - T10°		
Electrical Downtilt Deviation	Degree<	1°					
Impedance	Ohms	50					
VSWR	<	1.5					
Return Loss	dB>	14					
Isolation	dB>	27					
Passive Intermodulation	dBc<	-150					
Upper Sidelobe Suppression, Peak to 20°	dB>	N/A			16		
Cross-Polar Discrimination	dB>	15			15		
Maximum Effective Power Per Port	W	250			250		

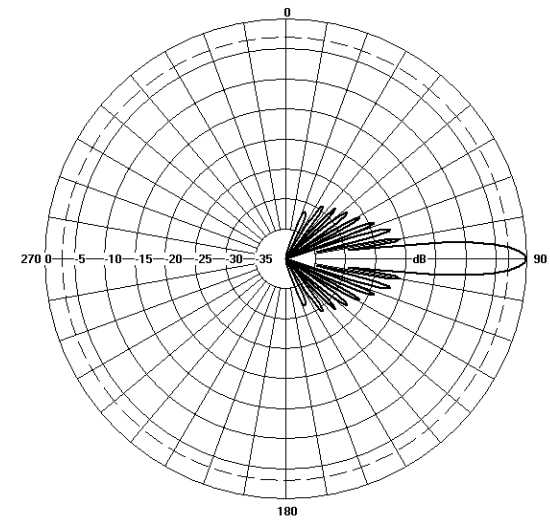
## Representative Pattern Files



Azimuth



Mid Band



High Band

Elevation

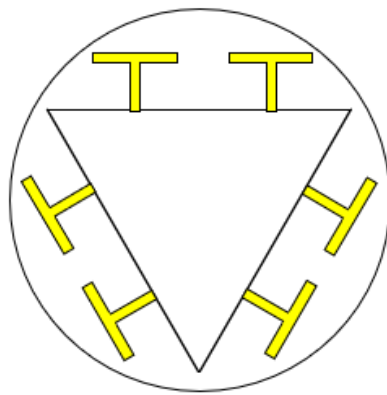
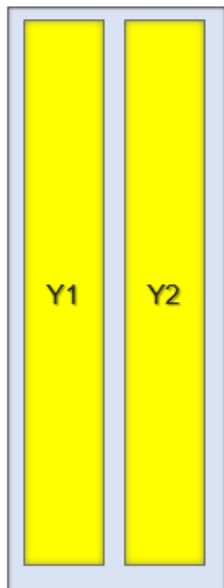
For radiation pattern files, please login at [www.alphawireless.com](http://www.alphawireless.com)

## TECHNICAL SPECIFICATION

## Mechanical Specifications

Dimensions	mm (in)	1830 (72) x 330 (12.9) - (L x Ø)
Packing Size (LxWxD)	mm (in)	2000 (79) x 500 (20) x 590 (23)
Net Weight (antenna)	kg (lb)	56 (123)
Net Weight (mount)	kg (lb)	Flange mount
Shipping Weight	kg (lb)	92 (203)
Connector Type (Female)	-	4.3-10
Connector Position	-	Bottom
Connector Quantity	-	12 (6P Mid Band, 6P Mid band)
Windload Frontal (at Rated Wind Speed: 150km/h)	N (lbf)	500 (113)
Windload Lateral (at Rated Wind Speed: 150km/h)	N (lbf)	500 (113)
Survival Wind Speed	km/h (mph)	200 (125)
Radome Material	-	UV-Stabilised PVC
Radome Colour	RAL	7035 (light 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



Array layout depicts one individual sector.  
Note: Coloured box sizes do not represent antenna sizes.

Array	Frequency MHz	Ports	RET ID
Y1	1452 – 2400	1 – 2	1
Y2	1710 – 2690	3 – 4	2

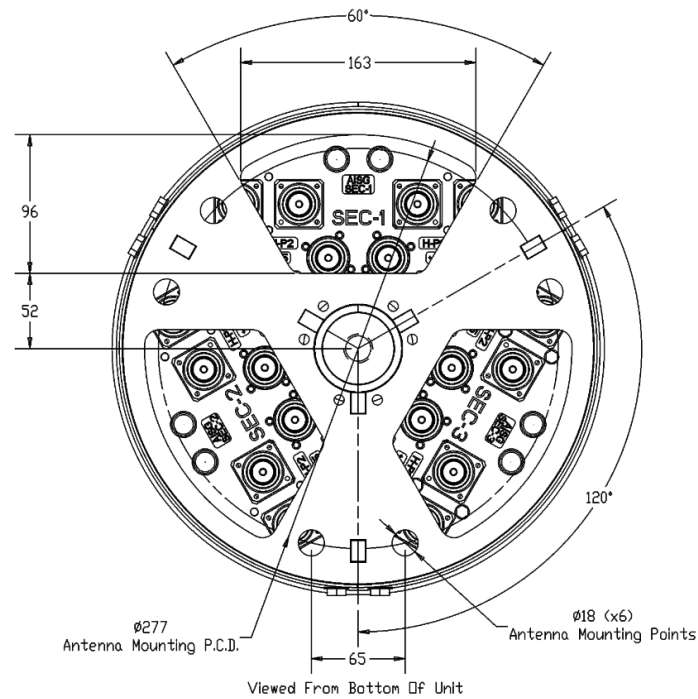
Configuration	
1452-2400 MHz	One RET per array: Y1 x3 Sectors
1710-2690 MHz	One RET per array: Y2 x3 Sectors
Total Quantity	Six RET Motor Controllers
Location and Interface	
RET Controller Location	Inside antenna radome housing
RET Interface	Pair of AISG 8 Pin DIN connectors, one male, one female
RET Interface Quantity	Three pairs of AISG 8 Pin DIN connectors, one per sector
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



## TECHNICAL SPECIFICATION

### Mounting Bracket Kit

330mm Canister Flange Mount (Note: M18 Mounting Holes fit both 330mm and 360mm diameter canisters)



Mounting Kit Tilt Range	Mounting Kit Material	Mounting Kit Pole Diameter
N/A	Galvanized Steel	N/A

### Ordering Info

Order Code - Antenna	Description
AW3780-E-F	Enclosed Remote Electrical Tilt (eRET) with 4.3-10 connectors.
Order Code - Accessories	Description
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")
PADC 1000	Portable AISG Controller
SADC 2000	Site AISG Controller
AW0326-3-PM-PF	AISG Jumper Cable Lengths 3 metres (9' 10")
AW0326-10-PM-PF	AISG Jumper Cable Lengths 10 metres (32' 9")
AW0326-25-PM-PF	AISG Jumper Cable Lengths 25 metres (82')
AW0326-50-PM-PF	AISG Jumper Cable Lengths 50 metres (164')

### Enquiries

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