WY 140-6N V2 WY 155-6N V2

VHF Base Station 6 Elements Yagi Antennas 140-175 MHz

MAIN FEATURES

- Directional Wideband Yagi antennas
- Developped to provide a highly symmetrical radiation pattern in E/H-plane
- Computer-designed for high gain and excellent front-to-back ratio
- Anodized aluminium and stainless steel hardware
- Fully designed & Manufactured in Italy

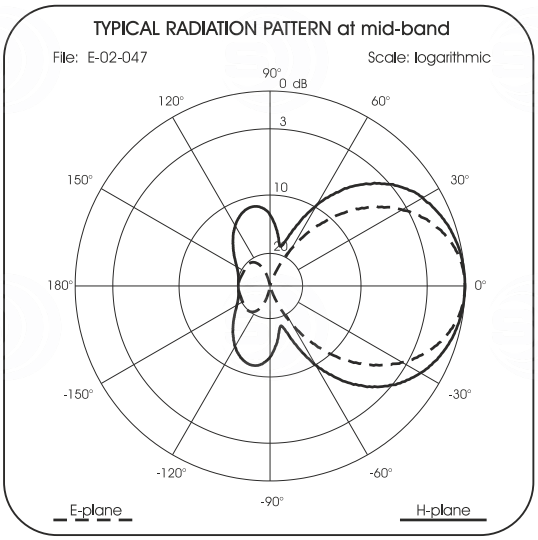
UP GRADED FEATURES

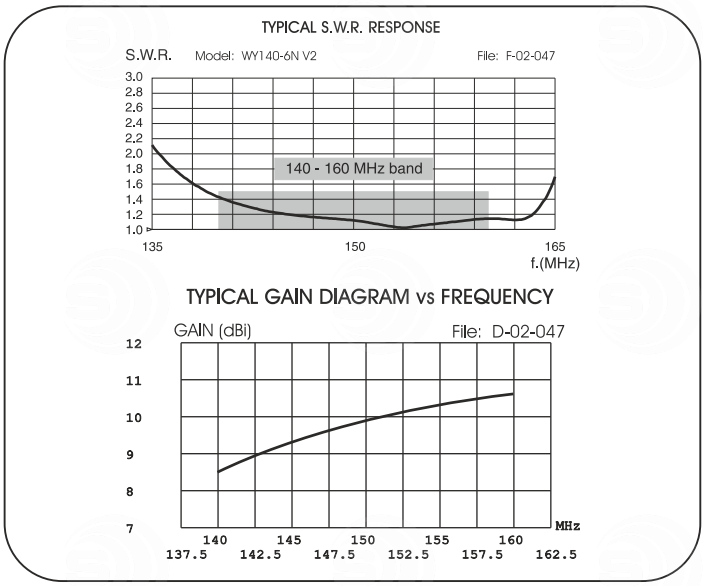
- Fully sealed, IP67 waterproof
- New internal design to maximize Power handling

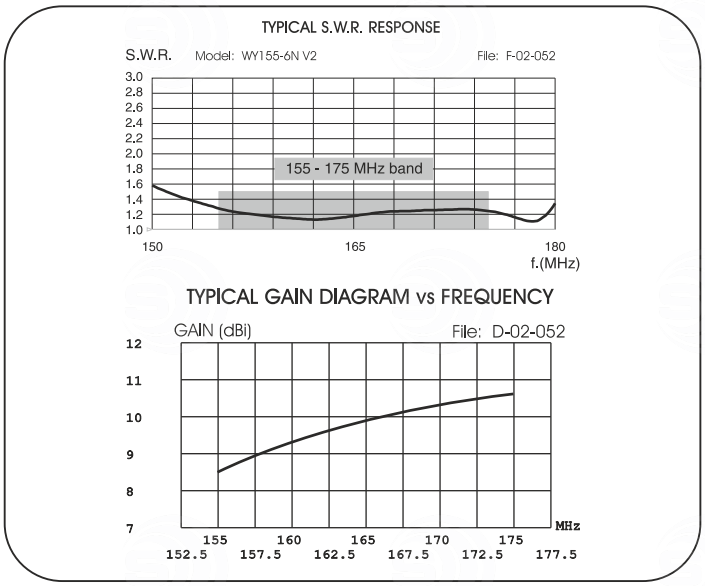


Electrical Data	WY 140-6N	WY 155-6N
Type	6 elements Yagi	
Frequency Range @ SWR ≤ 1.5	140 - 160 MHz	155 - 175 MHz
Impedance	50 Ω	
Radiation (H-plane) beamwidth @ -3 dB	80° - HCM code = 042LA28	75° - HCM code = 076LA15
Radiation (E-plane) beamwidth @ -3 dB	60° - HCM code = 031EA19	55° - HCM code = 027EA16
Front to back ratio	≥ 16 dB	
Polarization	Linear Vertical or Horizontal	
Gain	8.35 dBd - 10.5 dBi	
Max Power (CW) @ 30°C	250 Watts	
Grounding Protection	All metal parts are DC-grounded, the inner conductor shows a DC short	
Connector	N-female with rubber protection cap	

Mechanical Data		
Materials	Anodized 6063-T5 Aluminium, EPDM rubber, thermoplastic UV stabilized, Chromed Brass	
Wind Load @ 150 km/h	184 N	176 N
Wind Resistance	120 Km/h; 75 mi/h	120 Km/h; 75 mi/h
Wind Surface	0.150 m^2; 1.60 ft^2	0.145 m^2; 1.55 ft^2
Dimensions W x H (approx.)	2010 x 1085 mm; 6.6 x 6.4 ft	2010 x 985 mm; 6.6 x 3.2 ft
Turning radius (approx.)	1940 mm; 6.4 ft	1930 mm; 6.3 ft
Weight (approx.)	2440 gr; 5.4 lb	2390 gr; 5.2 lb
Ingress Protection	IP 67	
Operating temperature	-40° C to +60° C	
Mounting Mast	∅ 35 - 60 mm; 1.4 - 2.4 in	
Boom / Dipole / Element Diameter	∅ 32 mm; 1.25 in / ∅ 24 mm; 0.95 in / ∅ 12 mm; 0.5 in	







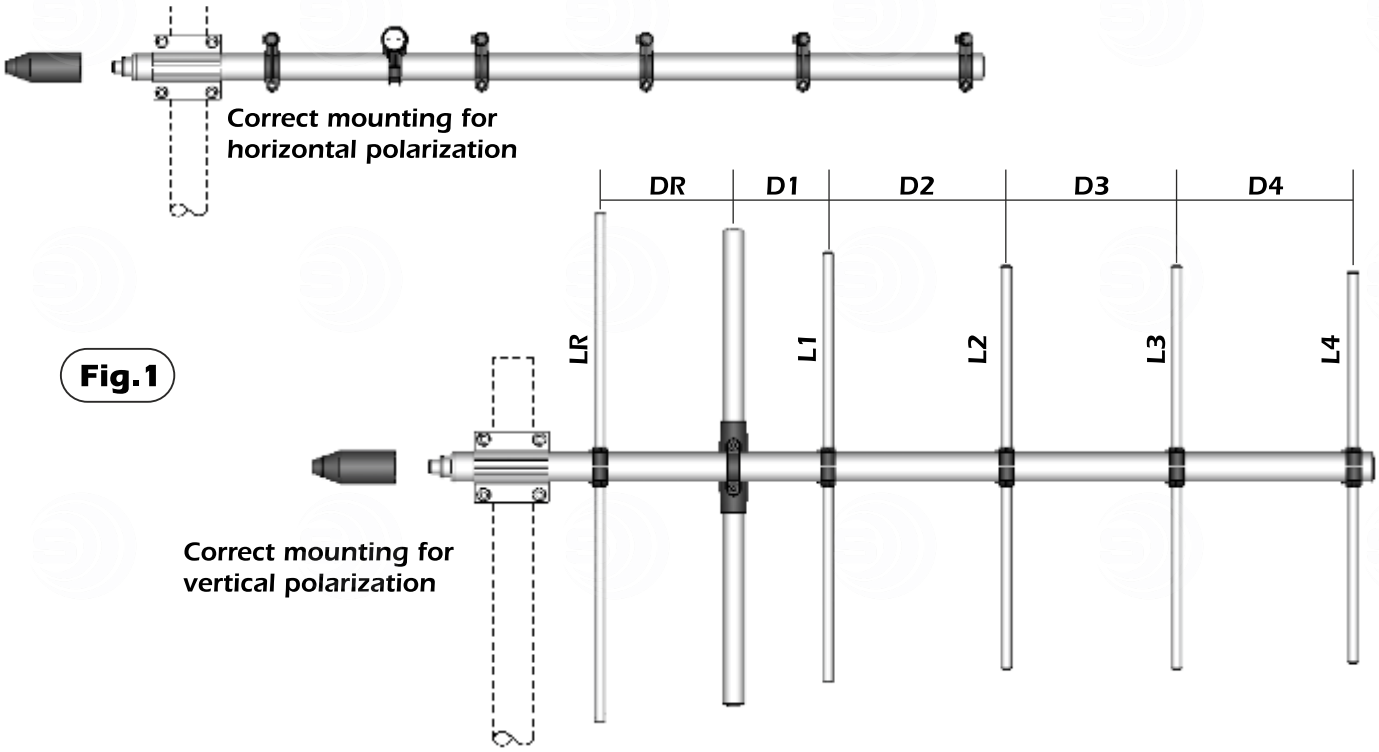


Fig.1

		LR	L1	L2	L3	L4	DR	D1	D2	D3	D4
WY 140-6N	(mm)	1080	830	810	790	740	355	208	378	323	368
	(in)	42.5	32.7	31.9	31.1	29.1	14.0	8.2	14.9	12.7	14.5
WY 155-6N	(mm)	980	750	735	720	670	355	208	378	323	368
	(in)	38.6	29.5	28.9	28.3	26.4	14.0	8.2	14.9	12.7	14.5

Element Mounting

1) By means of a meter measure the aluminium elements **A** and position them in the plastic support **B** of the boom according to **fig.1**.

2) Place the reference marker of the aluminium element **A** in the centre of the plastic support **B** (see **fig. 3**) and lock the screws **C** by the supplied key **D** (**fig. 4**). When the screws touch the aluminium tubes you can finally lock them turning for 1.5 turns.

Warning: do not exceed 1.5 turns. The plastic support threads could be damaged.

3) Insert the plastic caps **E** on the aluminium elements **A** (see **fig. 4**)

Part list	
Q.ty	*Description*
1	**A**) Aluminum tubes
2	**C**) M5x6 Hexagon socket set screw
1	**D**) 2.5mm Hexagonal key
2	**E**) Plastic cap

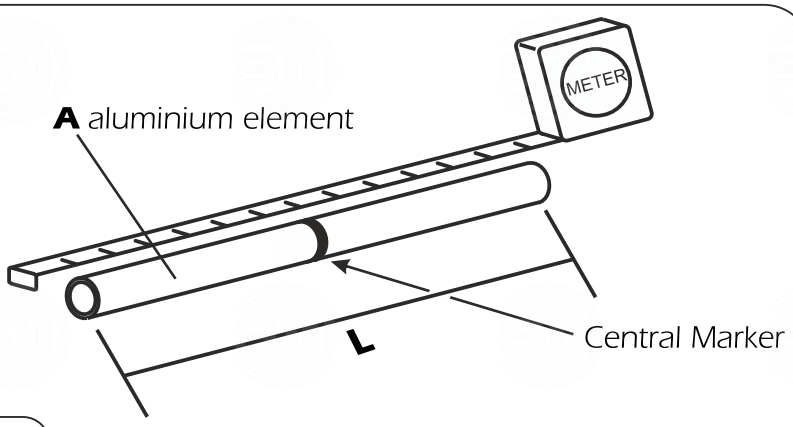


Fig.2

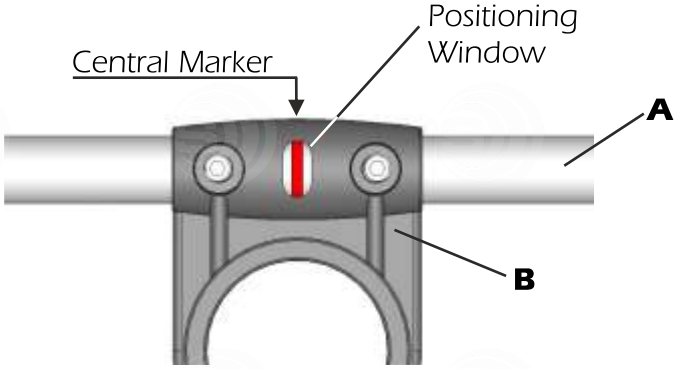


Fig.3

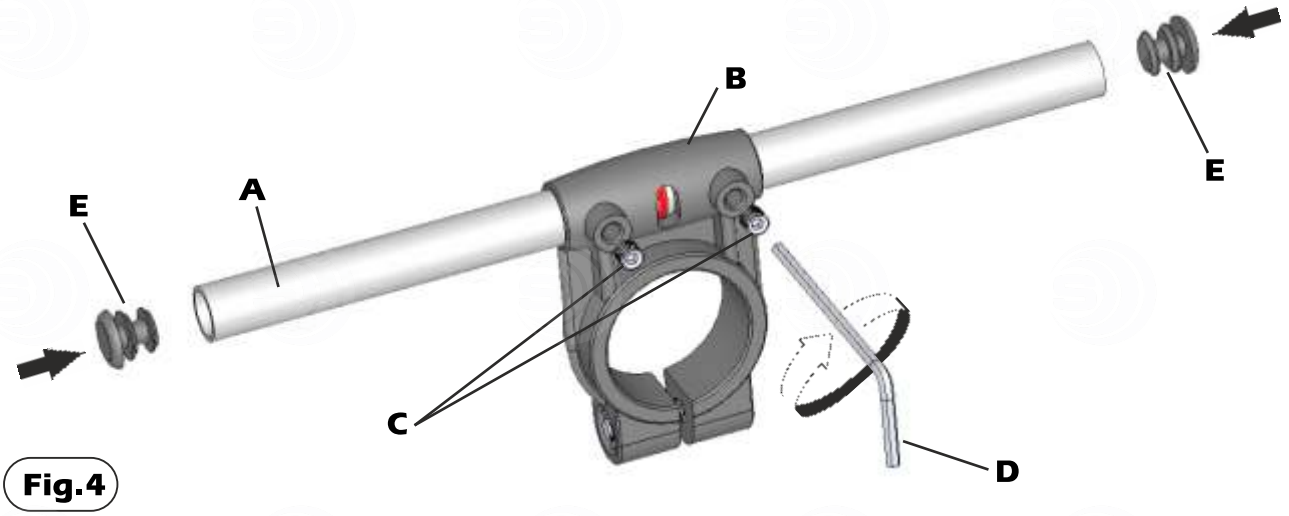


Fig.4

Dipole mounting

1) Place the O-ring gasket **F** on the dipole connector **G**. (See **Fig.5**)
2) Insert the antenna's dipole **H** in the dipole connector **G**
3) Fix the antenna's dipole **H** by using the palstic fixing clamp **I** and the screws **J**. Lock the screws to well fix the plastic parts to avoid any gap (see **Fig.6**)
Remark: the antenna's dipole must be aligned to the elements

Part list	
Q.ty	*Description*
1	**F**) O-ring gasket
1	**H**) Antenna's dipole
1	**I**) Plastic fixing clamp
2	**J**) Tapping Screws for plastic

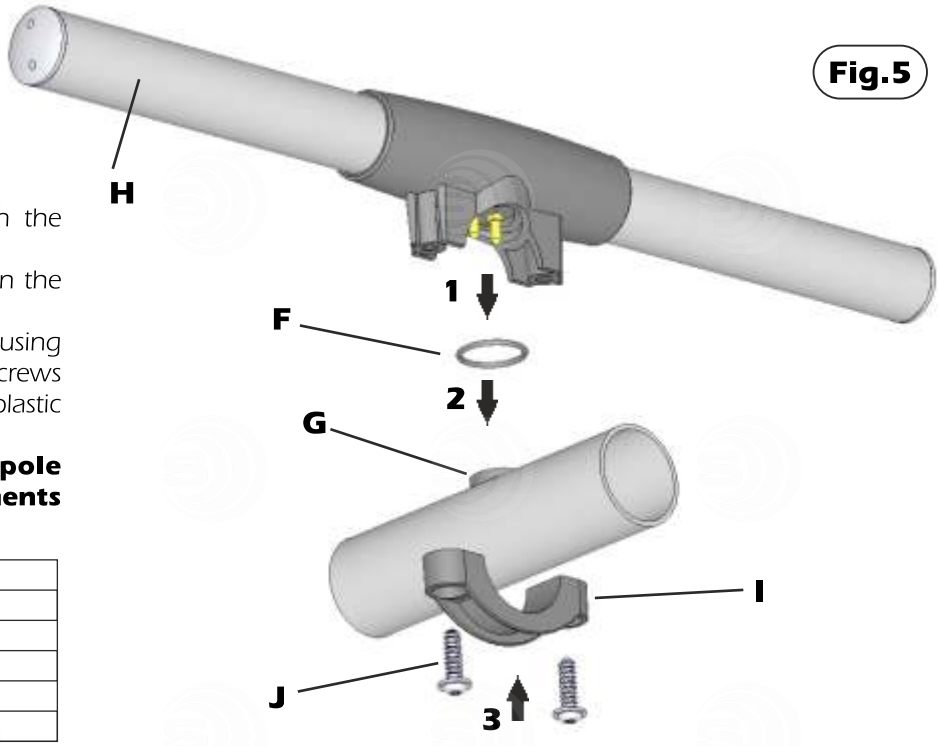


Fig.5

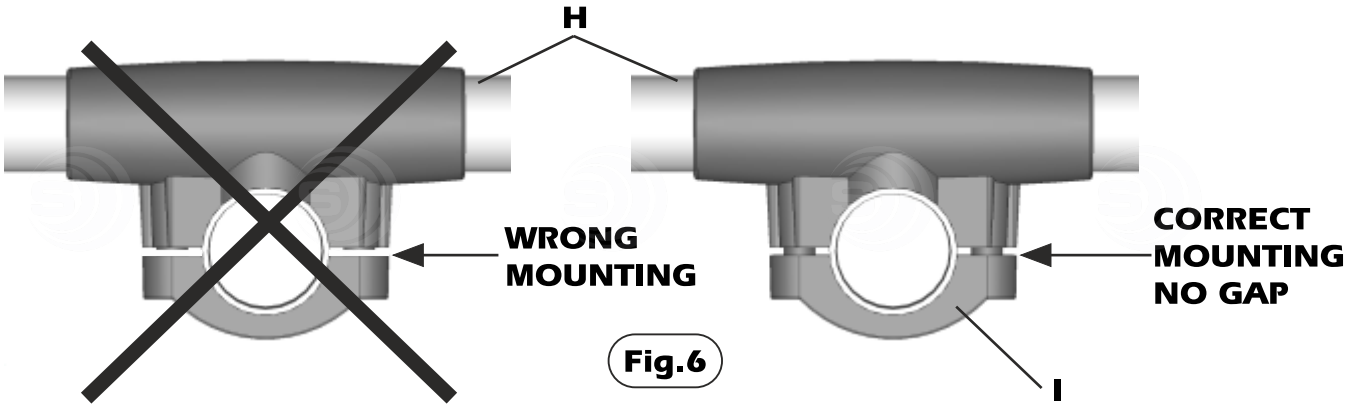
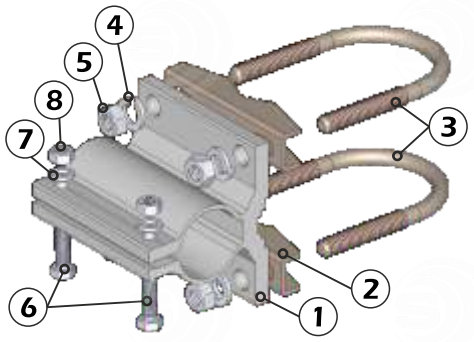


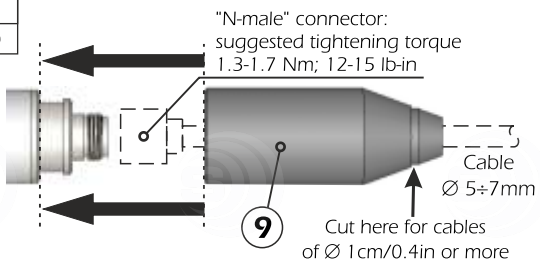
Fig.6

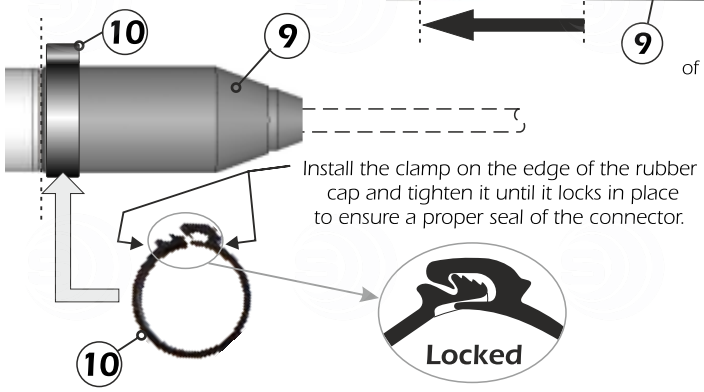
MOUNTING INSTRUCTIONS

FT-6 Bracket Part list		
Pos	*Q.ty*	*Description*
1	1	Extruded aluminium bracket
2	2	Steel bracket
3	2	M8x216 U-bolt
4	4	M8 Grower washer
5	4	M8 Hexagonal nut
6	2	M6x20 Hexagonal head screw
7	2	M6 Grower washer
8	2	M6 Hexagonal nut
9	1	Connector Protection Cap
10	1	Plastic clamping band
Dimensions:		90x85x6 mm; 3.5x3.3x2.6 in
Weight:		550 gr, 1.2 lb

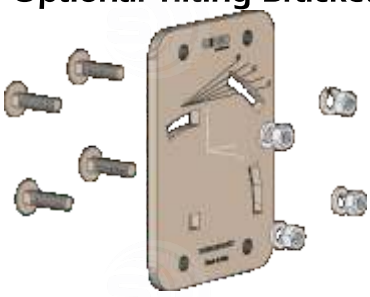
Re-order code: P/N 2519913.00





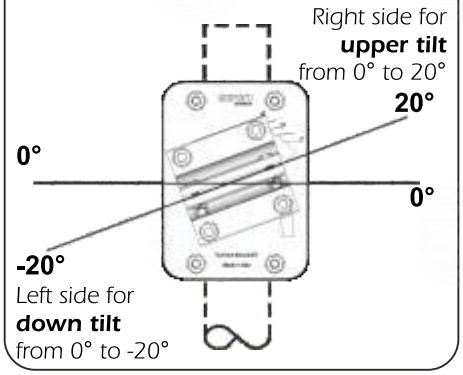


Optional Tilting Bracket

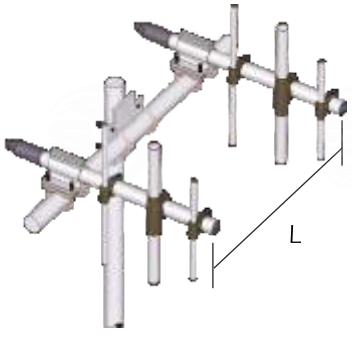


Order p/n: 2519803.00
Materials & Hardware: zinc plated steel
Dimensions: 115 x 155 x 6 mm.
Weight: 800 gr

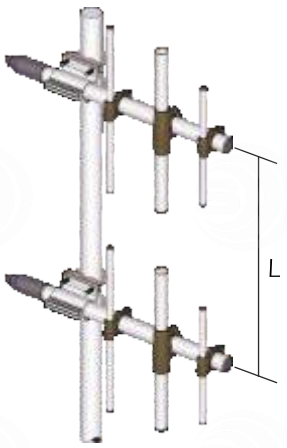
Part list	
Q.ty	*Description*
1	115x155x6 Tilting bracket
4	M8x25 Spheric head screw
4	M8 Grower washer
4	M8 Hexagonal nut



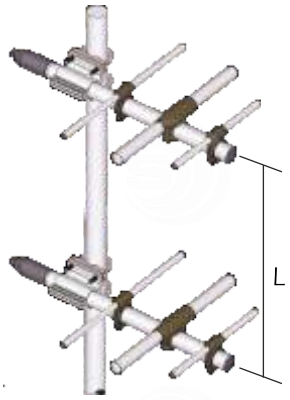
Stacking and Baying distance



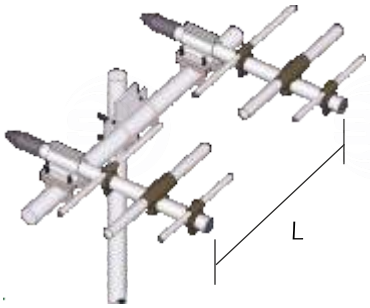
Vertical polarization
(Bayed)
L= 1.1 m; 3.6 ft



Vertical polarization
(Stacked)
L= 1.6 m; 5.25 ft



Horizontal polarization
(Stacked)
L= 1.1 m; 3.6 ft



Horizontal polarization
(Bayed)
L= 1.6 m; 5.25 ft

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