WIDE BAND DIPOLE ECOMAX - ALUMINUM

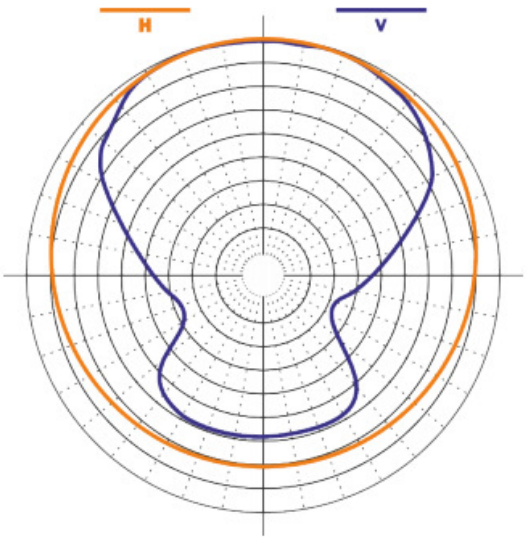
Installation and specifications

Sturdy construction	Construccion robusta
Nominal power 500W	Potencia nominal 500W
First class material	Materiales de primera calidad
Omnidirectional pattern25mm	Patron casi omnidireccional
Aluminum Pipes 28 and 30mm	Tubos de 25 y 30 vmm aluminio
N female connector	N hembra Conector
Deumontable	Desmontable
Low cost	Bajo costo
Broadband 88.5-108 Mhz	Banda ancha 87.5- 108 Mhz
Low weight	Bajo peso
Very easy assembly	Facil montaje

Max power	**Potencia maxima**	**500W N female / hembra**
Frequency	**Frecuencia**	**87.5 - 108 Mhz**
VSWR	**VSWR**	**> 1.4:1**
Gain *	**Ganancia ***	**2.14 dBi**
Polaritation	**Polarizacion**	**Vertical**
Weight	**Peso**	**2 Kg brackets included/soportes incl**
Impedance	**Impedancia**	**50 Ohms**
Wind load	**Carga al viento**	**5.5 Kgrms @ 160 Km/h**
Max wind speed	**Maxima Velocidad viento**	**190 Km / h**
Dipole and support	**Dipolo y Soporte**	**28mm - 30mm**
Vertical amplitude	**Amplitud vertical**	**70° @ -3dB E plane**
Mounting Brackets	**Soportes a mastil**	**30 / 60 mm**
Dimensions	**Dimensiones**	**1350 X 900 Cm**
Aluminum, Brass Teflon	**Aluminio, Laton Teflon**	

Technical data / Datos tecnicos

Dipoles Dipolos #	Gain Ganancia	Weight Peso	X factor Multiplicacion Times / veces	Wind load Carga al viento Kgrms @ 160Km/h	Max. Power Potencia Max N female		Tower Space Espacio torre Meters / Metros
1		2 Kgrms	1	5.5	500		----------
2	3 dB	4 Kgrms	2	11	1 Kw		2,50
3	4.5dB	6 Kgrms	3	15.5	1.5 Kw		5
4	6 dB	8 Kgrms	4	22	2 Kw		7.5
6	7,5dB	12 Kgrms	5	27,5	3 Kw		12.5
8	9dB	16 Kgrms	8	33	4 Kw		17.5



Dipoles Dipolos	Vertical amplitude
1	70°
2	35°
3	21°
4	16°
6	12°
8	8°

The antenna Is composed By:

1 Dipole

1 Dipole support or boom

1 Support Bracket

Tools need 2 units 13mm Wrench

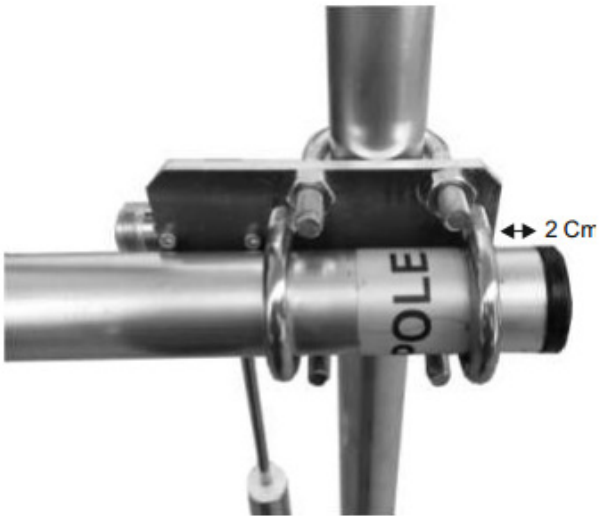
1) Mount bracket as shown the pictures

2) Insert boom inside 30mm clamps, and left pipe 2 Cm out of the aluminum square, DO NOT TIGHTEN YET

Tighten once the dipole is mount and parallel to the tower or mast

3) Insert the Boom on the dipole clamps, with the connector pointing to the inside, and left 2 Cm the pipe out.

Tight firmly with 13 mm wrench key



4) When the antena is installed over the tower or mast tighten the bracket and connect cable to the antenna and cover with ribbon tape , fix the coaxial cable along the boom with tie raps. The gamma macht must be mounted down.

Using an array of 2 or more dipoles it's necessary to calculate the spacing between

the elements ; The formula to do this in function of the frequency used :

" 300.000 : F (Mhz) x 0.8 = Distance in mm "

Example:

Freq: 98.5 Mhz----------300 / 98.5 = 3,045meters X 0.8 = 2.43 meters

Sample 4 antennas.

The head of power divider always on the middle of antenna system