



IØJXX di Donzello Rosanna

Via della Fattoria di Torrenova 36 - 00133 Roma - Italy

& Fax +39 (0) 6 - 27858223 & +39 3282899664

VAT number: IT09527381009

www.i0jxx.com - info@i0jxx.com



Skype: [i0jxx.com](https://www.skype.com/user/i0jxx)

36JXX23 Yagi

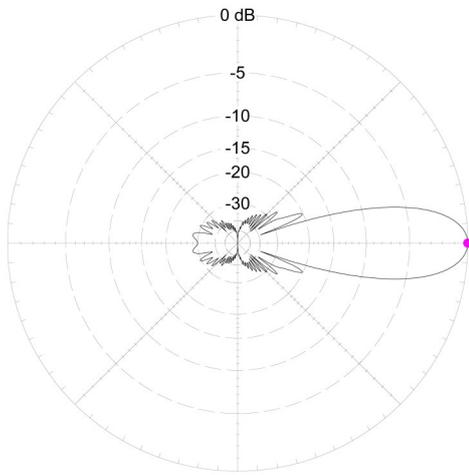
Item		Q.ty	Item		Q.ty
Stainless steel nut M5		1	Stainless steel bolt M5x20		11
Stainless steel nut M6		2	U_Bolt & Plate		1
Lock washer 5 mm Ø		1	Back Section boom 15 x 15 mm	145 cm.	1
Lock washer 6 mm Ø		2	Front Section boom 15 x 15 mm	147 cm.	1
Flat washer 6 mm Ø		2	Support Section boom 15 x 15 mm	146.5 cm.	1
			Spacing 12 mm Ø	70 mm	5

Total Field

EZNEC+

Total Field

EZNEC+

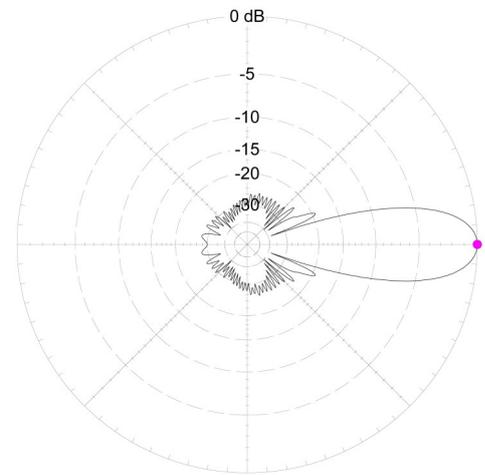


Dipole in free space

1296 MHz

Azimuth Plot
 Elevation Angle 0,0 deg.
 Outer Ring 20,04 dBi
 Cursor Az 0,0 deg.
 Gain 20,04 dBi
 0,0 dBmax

Slice Max Gain 20,04 dBi @ Az Angle = 0,0 deg.
 Front/Back 30,09 dB
 Beamwidth 19,8 deg.; -3dB @ 350,1, 9,9 deg.
 Sidelobe Gain -0,17 dBi @ Az Angle = 24,0 deg.
 Front/Sidelobe 20,21 dB



Dipole in free space

1296 MHz

Elevation Plot
 Azimuth Angle 0,0 deg.
 Outer Ring 20,04 dBi
 Cursor Elev 0,0 deg.
 Gain 20,04 dBi
 0,0 dBmax

Slice Max Gain 20,04 dBi @ Elev Angle = 0,0 deg.
 Front/Back 30,09 dB
 Beamwidth 20,2 deg.; -3dB @ 349,9, 10,1 deg.
 Sidelobe Gain 0,74 dBi @ Elev Angle = 24,0 deg.
 Front/Sidelobe 19,3 dB

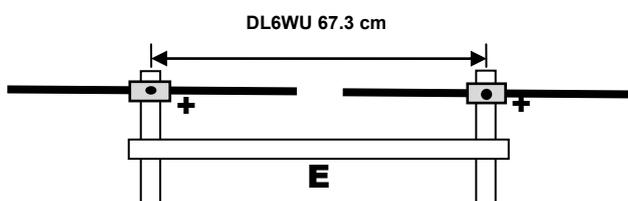
Stacking

In order to obtain the best results in coupling the antennas, we warmly recommend an adequate antenna stacking calculation which would allow the best forward gain together with low side lobes. The stacking distance may be calculated with the following formula from Güenter Hoch DL6WU

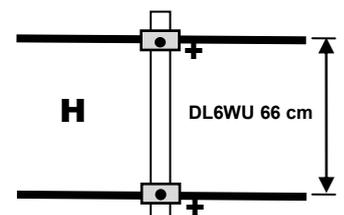
On the basis of further studies conducted by Lionel VE7BQH over the antenna stacking argument, a reduction of 5÷10% may be introduced on stacking distances without noticing significant overall worsening of the characteristics. Do respect the driven element supplying symmetry to allow anti-phase coupling

$$\text{Plane E} = 19.8^\circ = \frac{231.46}{2 * \sin (19.8 / 2)} = \frac{231.46}{0.3438} \cong 67.3 \text{ cm}$$

$$\text{Plane H} = 20.2^\circ = \frac{231.46}{2 * \sin (20.2 / 2)} = \frac{231.46}{0.3507} \cong 66 \text{ cm}$$



$$d = \frac{L}{2 * \sin (\Phi / 2)}$$



IØJXX may vary them without any warning

Made in Italy
www.i0jxx.com

