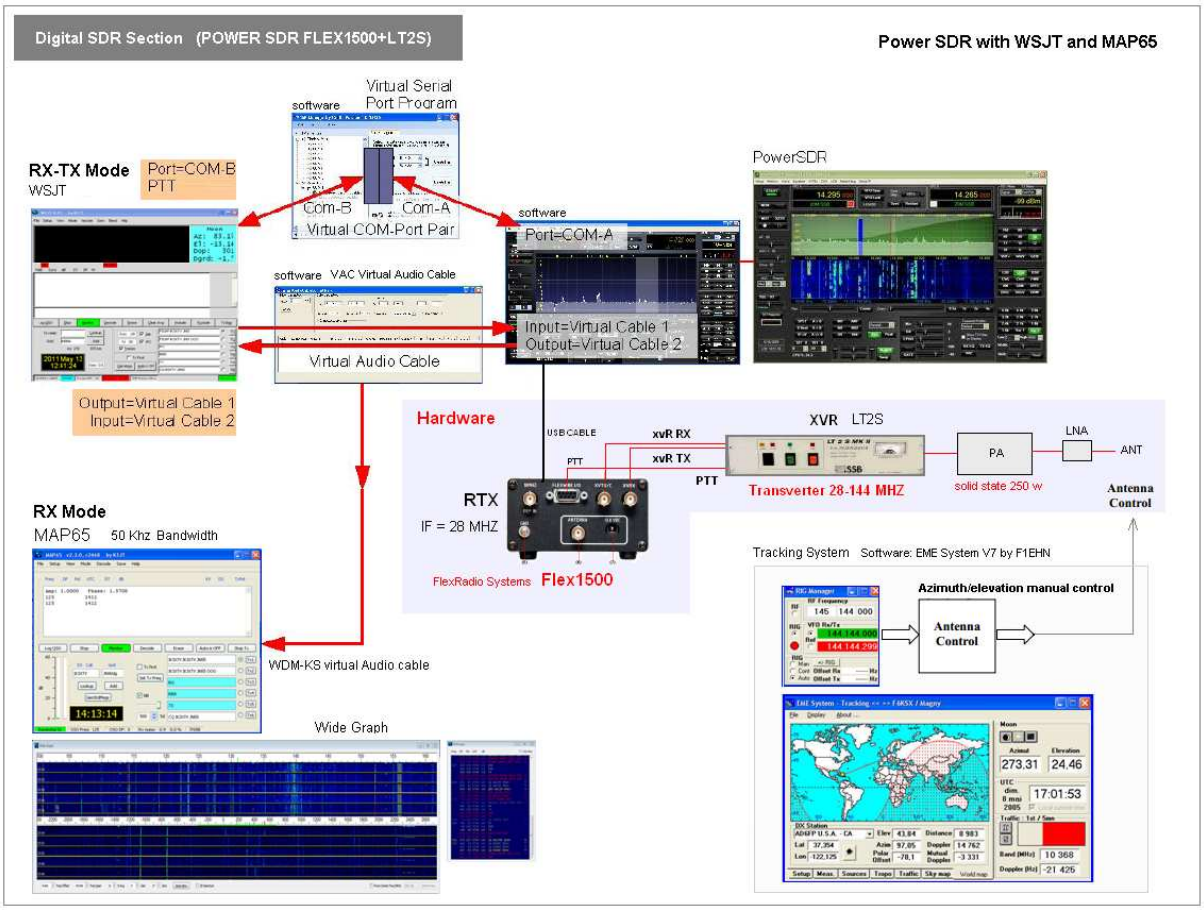
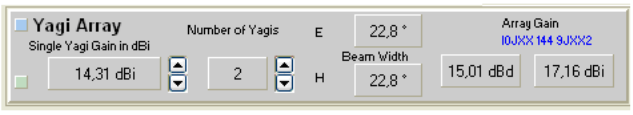
Frequency: 144 mhz
Antenna: 2X8 elements (H polarization) 8jxx2
Rtx: SDR Flex Radio 1500+Transverter LT2S SSB Electronic
LNA: Gasfet 22 dB gain – 0,7 dB NF
PA: solid state 250watts

Last update: June 2012

SDR Flex Radio 1500+Transverter LT2S SSB Electronic



Antenna System



single antenna

Gain	12.19 dBd/14.23 dBi
Angle -3dB E/H	34.54° - 37.74°
Spacing E/H	3.5 - 3.21 m
SWR	1:1.2
Boom lenght	4.25 m - 2.04 λ
Boom diameter	25 - 30 - 25
Element diameter	5 mm
Dipole	T-match
Connector	N precision
Power max	1500 W
Balun 1:4	RG142/U
Pole diameter	75 mm Ø MAX
Weight	3.2 kg
Wind area	0.15 m²

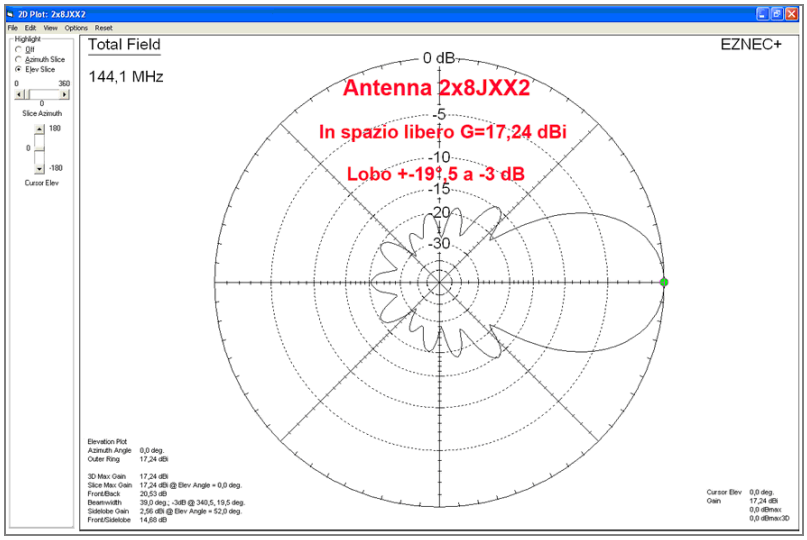
stacking distance

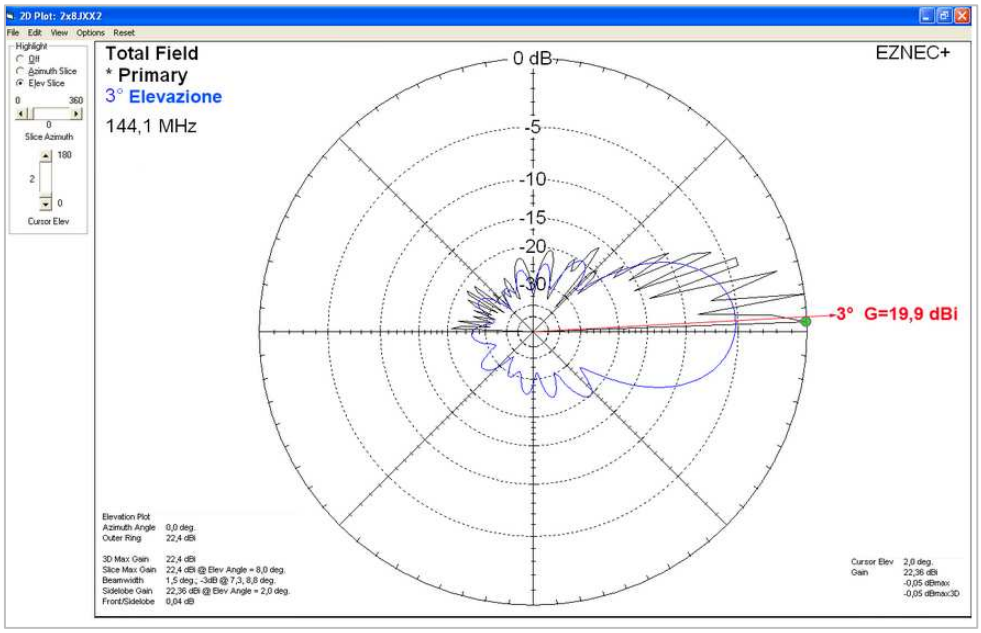
$$d = \frac{\lambda}{2 \cdot \sin(\Phi / 2)}$$

Plane E = 34.54 ° where $d = \frac{2079}{2 \cdot \sin(34.54 / 2)} = \frac{2079}{0.5937} \cong$ **3550 mm**

I use Fiberglass for the cross boom. Fiberglass is perfect for cross boom use. By using Fiberglass, you will be guaranteed of almost zero interaction between the antennas and the stacking boom.

EZNEC simulation 2D Plot Antenna 2x8JXX2





Receiver performance VK3UM eme calc software