

17 elements Yagi antenna

144 to 146 MHz

Part Nr. 20817



Electrical data

Radiation at 144.5 MHz

Effective electrical length : 3.14λ

Isotropic gain : 15.3 dBi

Aperture angle @ -3 dB

- E-plane : $2 \times 16.5^\circ$

- H-plane : $2 \times 17.9^\circ$

First side lobe set

- E-plane : -17.7 dB @ 43°
- H-plane : -13.1 dB @ 44°

Rear protection : -36.9 dB

Average stray radiation

- E-plane : -37 dB
- H-plane : -27 dB

Bandwidth

Gain @ -1 dB : 138 to 148 MHz

Nominal impedance : 50Ω

Impedance match bandwidth @ SWR <1.3/1 : 143.4 to 146.2 MHz

Acceptable RF power (continuous duty) : 1000 W

Array of 2 or 4 antennas

(optimized stacking distance. from center to center of elements. for minimal side lobe radiation)

- E plane - Electrical distance : 1.85λ
- Practical distance : 3.85 m
- H plane - Electrical distance : 1.80λ
- Practical distance : 3.74 m

Mechanical data

Connector : N

Overall length : 6.57 m

Mass : 6.5 kg

Effective wind load

- Horizontal polarization : 0.29 m^2
- Vertical polarization : 0.25 m^2

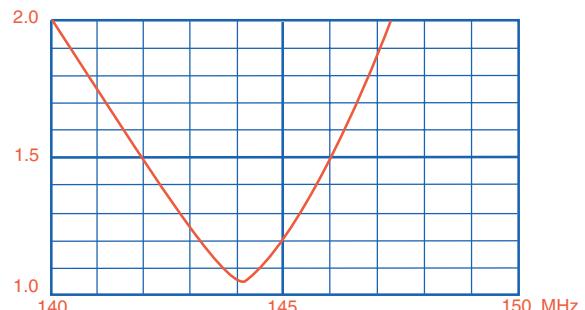
Approximate wind load (25 m/s - 55 mph)

- Horizontal polarization : 10.9 daN
- Vertical polarization : 9.7 daN

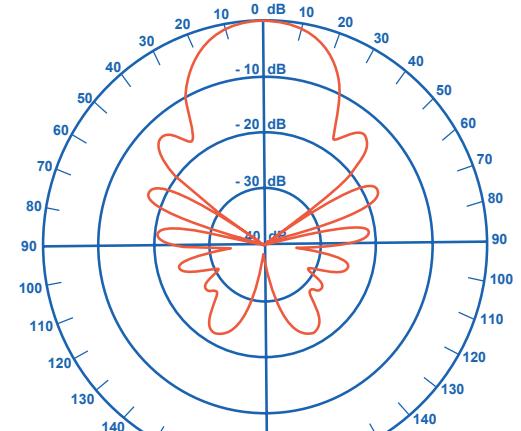
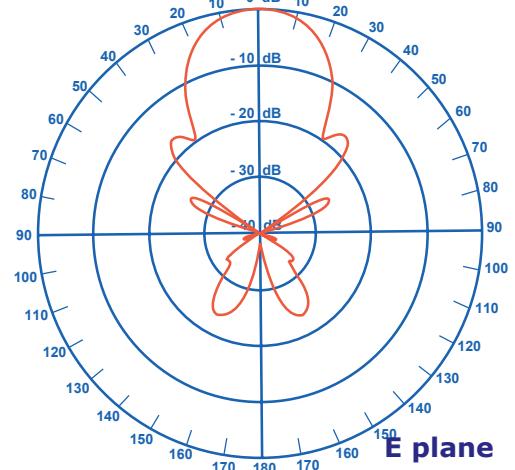
Approximate wind load (45 m/s - 100 mph)

- Horizontal polarization : 35.3 daN
- Vertical polarization : 31.4 daN

SWR curve



Radiation patterns



Autoryzowany
Przedstawiciel
w Polsce:

abel
profit
centrum radiokomunikacji

INRADIO
ABEL & PRO-FIT Centrum Radiokomunikacji
ul. Puszkina 80 92-516 Łódź Poland
tel. (+42) 649 28 28 fax: (+42) 677 04 71
e-mail: biuro@inRADIO.pl
internet: www.inRADIO.pl

AFT