

23 elements Yagi antenna

1260 to 1300 MHz

Part Nr. 20623



Electrical data

Radiation at 1296 MHz

Effective electrical length : 7.43λ
Isotropic gain : 18.1 dBi
Aperture angle @ -3 dB
 - E-plane : $2 \times 10.1^\circ$
 - H-plane : $2 \times 10.3^\circ$

First side lobe set

- E-plane : -10.6 dB @ 27°
- H-plane : -9.3 dB @ 28°

Rear protection : -21 dB

Average stray radiation

- E-plane : -37 dB
- H-plane : -28 dB

Bandwidth

Gain @ -1 dB : 1246 to 1326 MHz
Nominal impedance : 50Ω
Impedance match bandwidth @ SWR <1.3/1 : 1290 to 1302 MHz
Acceptable RF power (continuous duty) : 300 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 : 3.05λ
 - Practical distance : 0.70 m
- H plane - Electrical distance : 3.05λ
 - Practical distance : 0.70 m

Mechanical data

Connector : N
Overall length : 1.75 m
Mass : 1.4 kg

Effective wind load

- Horizontal polarization : 0.06 m^2
- Vertical polarization : 0.05 m^2

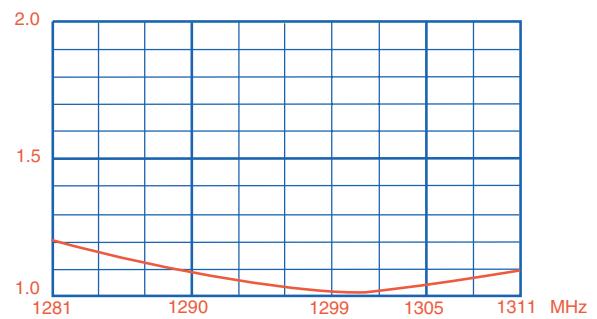
Approximate wind load (25 m/s - 55 mph)

- Horizontal polarization : 2.4 daN
- Vertical polarization : 2.0 daN

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

- Horizontal polarization : 7.9 daN
- Vertical polarization : 6.5 daN

SWR curve



Radiation patterns

