

23 elements Yagi antenna

1240 to 1260 MHz

Part Nr. 20624



Electrical data

Radiation at 1255 MHz

Effective electrical length : 7.61λ
Isotropic gain : 18.5 dBi
Aperture angle @ -3 dB

- E-plane : $2 \times 9.6^\circ$
- H-plane : $2 \times 9.9^\circ$

First side lobe set

- E-plane : -10.0 dB @ 25°
- H-plane : -8.7 dB @ 25°

Rear protection : -19.5 dB

Average stray radiation

- E-plane : -36 dB
- H-plane : -28 dB

Bandwidth

Gain @ -1 dB : 1205 to 1271 MHz

Nominal impedance : 50Ω

Impedance match bandwidth @ SWR <1.3/1 : 1250 to 1260 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 : 2.95λ
- Pratical distance : 0.70 m
- H plane - Electrical distance : 2.95λ
- Pratical distance : 0.70 m

Mechanical data

Connector : N

Overall length : 1.85 m

Mass : 1.4 kg

Effective wind load

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

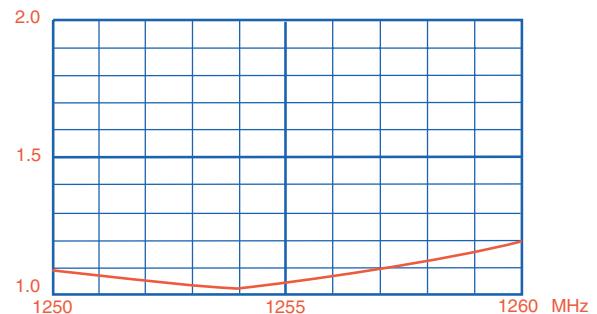
Approximate wind load (25 m/s - 55 mph)

- Horizontal polarization : 2.5 daN
- Vertical polarization : 2.1 daN

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

- Horizontal polarization : 8.0 daN
- Vertical polarization : 6.7 daN

SWR curve



Radiation patterns

