

55 elements Yagi antenna

1260 to 1300 MHz

Part Nr. 20655



Electrical data

Radiation at 1296 MHz

Effective electrical length : 19.9λ

Isotropic gain : 21.9 dBi

Aperture angle @ -3 dB

- E-plane : $2 \times 6.6^\circ$

- H-plane : $2 \times 8.7^\circ$

First side lobe set

- E-plane : -10.0 dB @ 17°

- H-plane : -9.6 dB @ 17°

Rear protection : -23.7 dB

Average stray radiation

- E-plane : -42 dB

- H-plane : -32 dB

Bandwidth

Gain @ -1 dB : 1253 to 1297 MHz

Nominal impedance : 50Ω

Impedance match bandwidth @ SWR <1.3/1 : 1290 to 1300 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 : 4.53λ

- Practical distance : 1.05 m

- H plane - Electrical distance : 4.53λ

- Practical distance : 1.05 m

Mechanical data

Connector : N

Overall length : 4.64 m

Mass : 4.0 kg

Effective wind load

- Horizontal polarization : 0.20 m²

- Vertical polarization : 0.12 m²

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

- Horizontal polarization : 7.5 daN

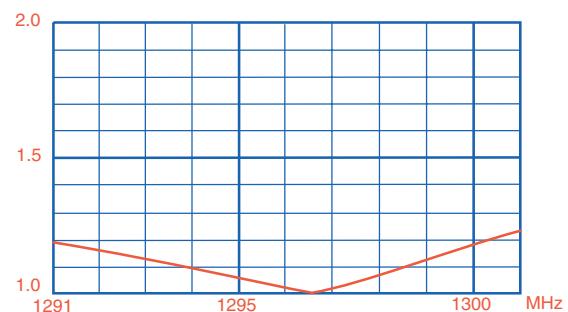
- Vertical polarization : 4.7 daN

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

- Horizontal polarization : 24.6 daN

- Vertical polarization : 15.1 daN

SWR curve



Radiation patterns

