

25 elements Yagi antenna

2300 to 2420 MHz

Part Nr. 20745



Electrical data

Radiation at 2400 MHz

Effective electrical length : 10.0λ
Isotropic gain : 18.1 dBi
Aperture angle @ -3 dB
 - E-plane : $2 \times 7.2^\circ$
 - H-plane : $2 \times 7.3^\circ$

First side lobe set

- E-plane : -11 dB @ 22°
- H-plane : -9.5 dB @ 22°

Rear protection : -25 dB

Average stray radiation

- E-plane : -23 dB
- H-plane : -22 dB

Bandwidth

Gain @ -1 dB : 2300 to 2450 MHz
Nominal impedance : 50Ω

Impedance match bandwidth @ SWR <1.3/1 : 2300 to 2420 MHz

Acceptable RF power (continuous duty) : 200 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 : 3.33λ
 - Practical distance : 0.42 m
- H plane - Electrical distance : 3.33λ
 - Practical distance : 0.42 m

Mechanical data

Connector : N
Overall length : 1.45 m
Mass : 0.95 kg

Effective wind load

- Horizontal polarization : 0.056 m^2
- Vertical polarization : 0.032 m^2

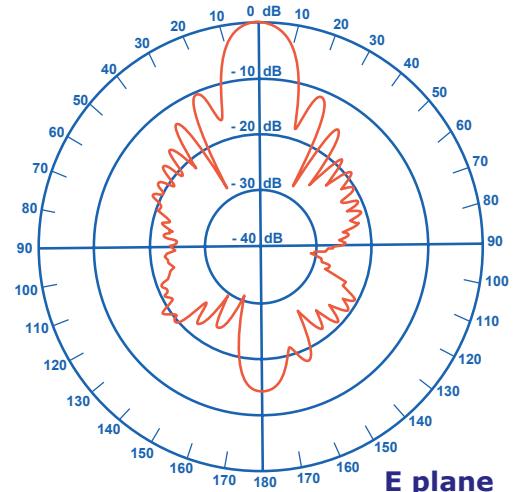
Approximate wind load (25 m/s - 55 mph)

- Horizontal polarization : 2.2 daN
- Vertical polarization : 1.2 daN

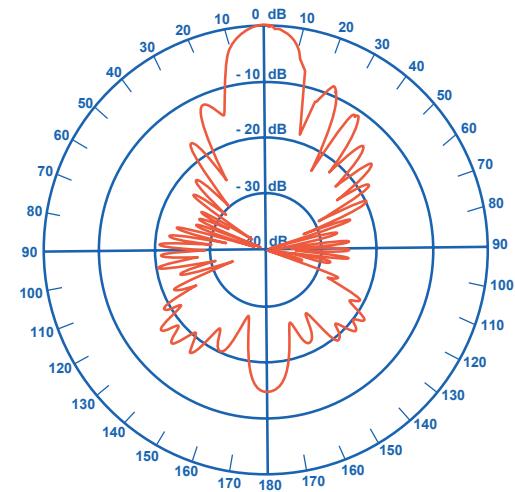
Approximate wind load (45 m/s - 100 mph)

- Horizontal polarization : 6.9 daN
- Vertical polarization : 4.0 daN

Radiation patterns



E plane



H plane