

21 elements Yagi antenna

432 to 434 MHz

Part Nr. 20921



Electrical data

Radiation at 432 MHz

Effective electrical length : 6.57 λ

Isotropic gain : 18.1 dBi

Aperture angle @ -3 dB

- E-plane : 2 x 11.8°

- H-plane : 2 x 12.2°

First side lobe set

- E-plane : - 14.5 dB @ 29°

- H-plane : - 12.9 dB @ 29°

Rear protection : - 29.7 dB

Average stray radiation

- E-plane : - 38 dB

- H-plane : - 29 dB

Bandwidth

Gain @ -1 dB : 416 to 440 MHz

Nominal impedance : 50 Ω

Impedance match bandwidth @ SWR <1.3/1..... : 431.0 to 439.0 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 : 2.33 λ

- Pratical distance : 1.62 m

- H plane - Electrical distance : 2.33 λ

- Pratical distance : 1.62 m

Mechanical data

Connector : N

Overall length : 4.60 m

Mass : 3.1 kg

Effective wind load

- Horizontal polarization : 0.16 m²

- Vertical polarization : 0.13 m²

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

- Horizontal polarization : 6.5 daN

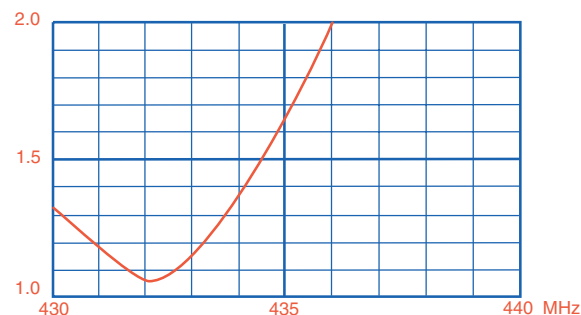
- Vertical polarization : 5.3 daN

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

- Horizontal polarization : 21.1 daN

- Vertical polarization : 17.1 daN

SWR curve



Radiation patterns

