

9 elements Yagi antenna

430 to 440 MHz

Part Nr. 20909



Electrical data

Radiation at 432 MHz

Effective electrical length	: 1.59 λ
Isotropic gain	: 13.1 dBi
Aperture angle @ -3 dB	
- E-plane	: 2 x 20.6°
- H-plane	: 2 x 23.7°
First side lobe set	
- E-plane	: - 22.2 dB @ 57°
- H-plane	: - 14.7 dB @ 64°
Rear protection	: - 16.8 dB
Average stray radiation	
- E-plane	: - 34 dB
- H-plane	: - 22 dB

Bandwidth

Gain @ -1 dB	: 409 to 440 MHz
Nominal impedance	: 50 Ω
Impedance match bandwidth @ SWR <1.3/1.....	: 431.0 to 438.5 MHz
Acceptable RF power (continuous duty)	: 1000 W

Array of 2 or 4 antennas

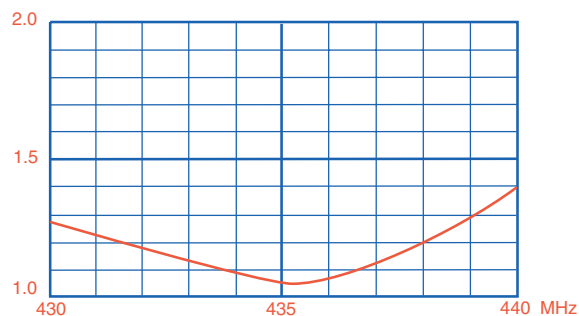
(optimized stacking distance. from center to center of elements. for minimal side lobe radiation)

- E plane - Electrical distance	: 1.33 λ
- Pratical distance	: 0.92 m
- H plane - Electrical distance	: 1.33 λ
- Pratical distance	: 0.92 m

Mechanical data

Connector	: N
Overall length	: 1.24 m
Mass	: 1.2 kg
Effective wind load	
- Horizontal polarization	: 0.03 m ²
- Vertical polarization	: 0.04 m ²
Approximate wind load (25 m/s - 55 mph)	
- Horizontal polarization	: 1.0 daN
- Vertical polarization	: 1.6 daN
Approximate wind load (45 m/s - 100 mph)	
- Horizontal polarization	: 3.3 daN
- Vertical polarization	: 5.3 daN

SWR curve



Radiation patterns

