

21 elements Yagi antenna

432 to 434 MHz

Part Nr. 220921



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

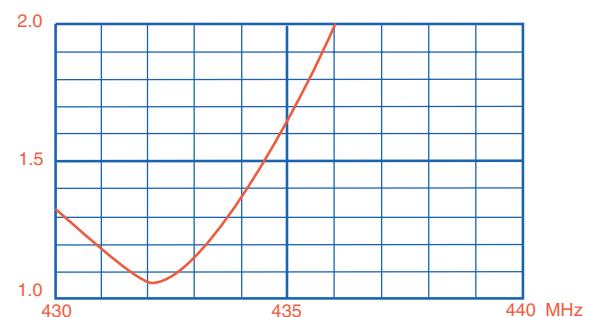
(optimized stacking distance. from center to center of elements. for minimal side lobe radiation)

- E plane - Electrical distance : 2.33 λ
- Pratical distance : 1.62 m
- H plane - Electrical distance : 2.33 λ
- Pratical distance : 1.62 m

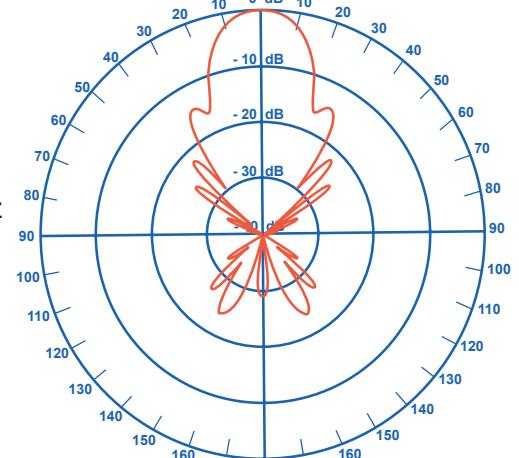
Mechanical data

Connector	: N
Overall length	: 4.60 m
Mass	: 3.1 kg
Effective wind load	
- Horizontal polarization	: 0.16 m^2
- Vertical polarization	: 0.13 m^2
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

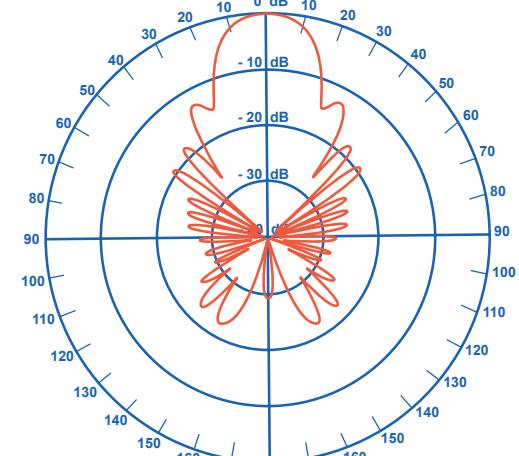
SWR curve



Radiation patterns



E plane



H plane