

19 elements Yagi antenna

430 to 440 MHz

Part Nr. 220919



Electrical data

Radiation at 432 MHz

Effective electrical length	: 4.02 λ
Isotropic gain	: 16.4 dBi
Aperture angle @ -3 dB	
- E-plane	: 2 x 14.8°
- H-plane	: 2 x 15.7°
First side lobe set	
- E-plane	: - 16.0 dB @ 38°
- H-plane	: - 12.9 dB @ 38°
Rear protection	: - 23.6 dB
Average stray radiation	
- E-plane	: - 38 dB
- H-plane	: - 28 dB

Bandwidth

Gain @ -1 dB	: 415 to 442 MHz
Nominal impedance	: 50 Ω
Impedance match bandwidth @ SWR <1.3/1.....	: 431.0 to 439.0 MHz
Acceptable RF power (continous duty)	: 1000 W

Array of 2 or 4 antennas

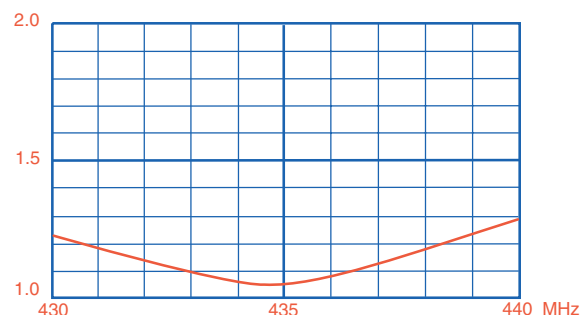
(optimized stacking distance. from center to center of elements. for minimal side lobe radiation)

- E plane - Electrical distance	: 1.80 λ
- Pratical distance	: 1.25 m
- H plane - Electrical distance	: 1.80 λ
- Pratical distance	: 1.25 m

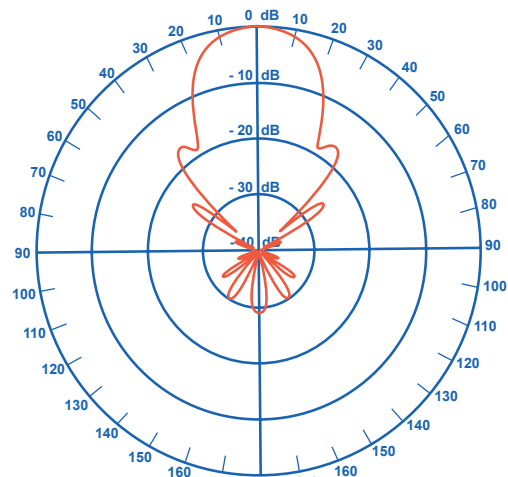
Mechanical data

Connector	: N
Overall length	: 2.82 m
Mass	: 1.9 kg
Effective wind load	
- Horizontal polarization	: 0.06 m ²
- Vertical polarization	: 0.09 m ²
Approximate wind load (25 m/s - 55 mph)	
- Horizontal polarization	: 2.3 daN
- Vertical polarization	: 3.5 daN
Approximate wind load (45 m/s - 100 mph)	
- Horizontal polarization	: 7.5 daN
- Vertical polarization	: 11.3 daN

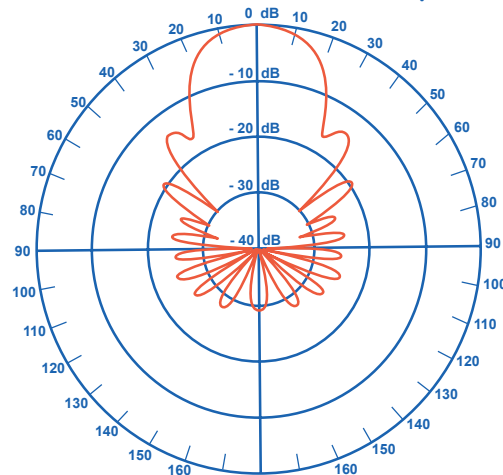
SWR curve



Radiation patterns



E plane



H plane

