

11 elements Yagi antenna

144 to 146 MHz

Part Nr. 20811



Electrical data

Radiation at 144.5 MHz

Effective electrical length	: 2.2 λ
Isotropic gain	: 14.2 dBi
Aperture angle @ -3 dB	
- E-plane	: 2 x 18.5°
- H-plane	: 2 x 20.0°
First side lobe set	
- E-plane	: - 18.2 dB @ 48°
- H-plane	: - 12.5 dB @ 49°
Rear protection	: - 27.4 dB
Average stray radiation	
- E-plane	: - 32 dB
- H-plane	: - 25 dB

Bandwidth

Gain @ -1 dB	: 141 to 147.5 MHz
Nominal impedance	: 50 Ω
Impedance match bandwidth @ SWR <1.3/1.....	: 143.4 to 146.2 MHz
Acceptable RF power (continous duty)	: 1000 W

Array of 2 or 4 antennas

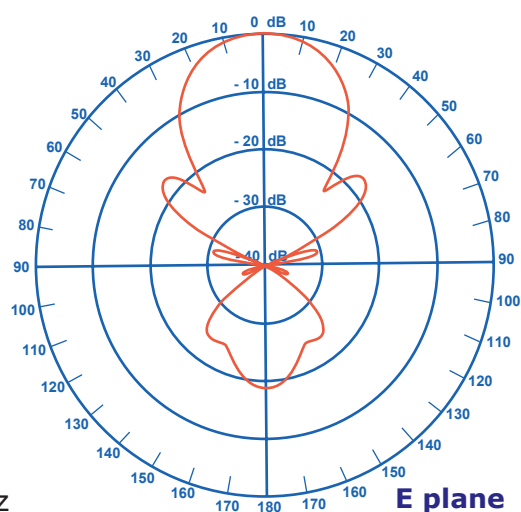
(optimized stacking distance. from center to center of elements. for minimal side lobe radiation)

- E plane - Electrical distance	: 1.7 λ
- Pratical distance	: 3.53 m
- H plane - Electrical distance	: 1.6 λ
- Pratical distance	: 3.32 m

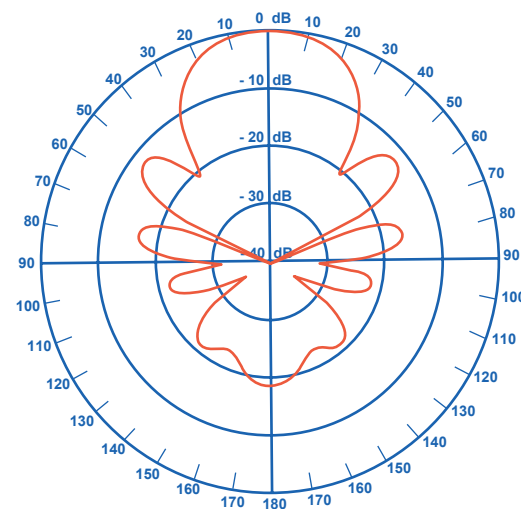
Mechanical data

Connector	: N
Overall length	: 4.56 m
Mass	: 3.5 kg
Effective wind load	
- Horizontal polarization	: 0.18 m ²
- Vertical polarization	: 0.17 m ²
Approximate wind load (25 m/s - 55 mph)	
- Horizontal polarization	: 6.9 daN
- Vertical polarization	: 6.7 daN
Approximate wind load (45 m/s - 100 mph)	
- Horizontal polarization	: 22.4 daN
- Vertical polarization	: 21.6 daN

Radiation patterns



E plane



H plane

