

2x11 elements Yagi antenna

144 to 146 MHz

Part Nr. 20822



Electrical data

Radiation at 144.9 MHz

Effective electrical length	: 2.20 λ
Isotropic gain	: 14.0 dBi
Aperture angle @ -3 dB	
- E-plane	: 2 x 18.3°
- H-plane	: 2 x 20.3°
First side lobe set	
- E-plane	: - 18.0 dB @ 50°
- H-plane	: - 12.5 dB @ 50°
Rear protection	: - 18.5 dB
Average stray radiation	
- E-plane	: - 36 dB
- H-plane	: - 24 dB

Bandwidth

Gain @ -1 dB	: 142 to 148 MHz
Nominal impedance	: 50 Ω
Impedance match bandwidth @ SWR <1.3/1.....	: 139.5 to 146.7 MHz
Acceptable RF power (continuous duty)	: 1000 W
Required phase delay between frontmost and rearmost driven element	: 59°

Array of 2 or 4 antennas

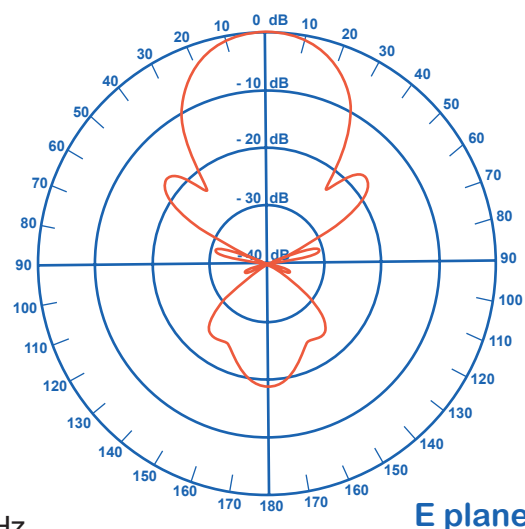
(optimized stacking distance. from center to center of elements. for minimal side lobe radiation)

- Electrical distance	: 1.46 λ
- Pratical distance	: 3.05 m

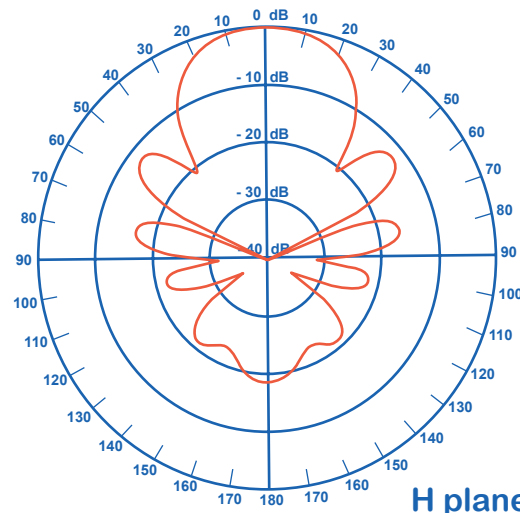
Mechanical data

Connector	: N
Overall length	: 4.62 m
Mass	: 4.2 kg
Effective wind load.....	: 0.2 m ²
Approximate wind load (25 m/s - 55 mph)	: 7.6 daN
Approximate wind load (45 m/s - 100 mph)	: 24.5 daN

Radiation patterns



E plane



H plane

