

Pro-XL 144/23L 11 elements yagi antenna

144 to 148 MHz

Part Nr. 220311



Electrical data

Radiation at 144.3 MHz

Effective electrical length	: 2.33 λ
Isotropic gain	: 14.2 dBi
Aperture angle @ -3 dB	
- E-plane	: 2 x 18.4°
- H-plane	: 2 x 19.4°
First side lobe set	
- E-plane	: - 18 dB @ 50°
- H-plane	: - 12 dB @ 50°
Rear protection	: - 21 dB
Average stray radiation	
- E-plane	: - 30 dB
- H-plane	: - 24 dB

Bandwidth

Gain @ -1 dB	: 141 to 149 MHz
Nominal impedance	: 50 Ω
Impedance match bandwidth @ SWR <1.3/1.....	: 143 to 147 MHz
Maximum RF power (peak, SSB/CW)	: 1000 W

Array of 2 or 4 antennas

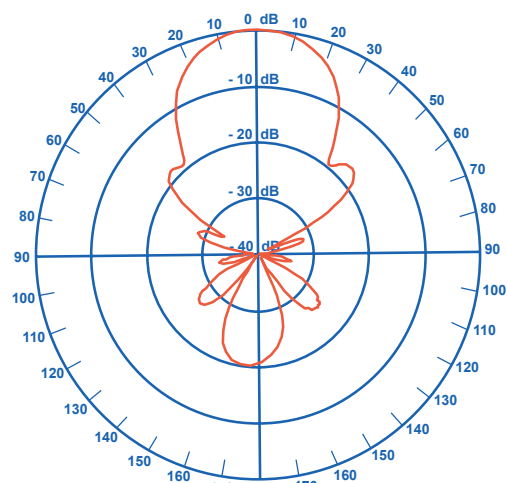
(optimized stacking distance. from center to center of elements. for minimal side lobe radiation)

- E plane - Electrical distance	: 1.70 λ
- Pratical distance	: 3.53 m
- H plane - Electrical distance	: 1.59 λ
- Pratical distance	: 3.32 m

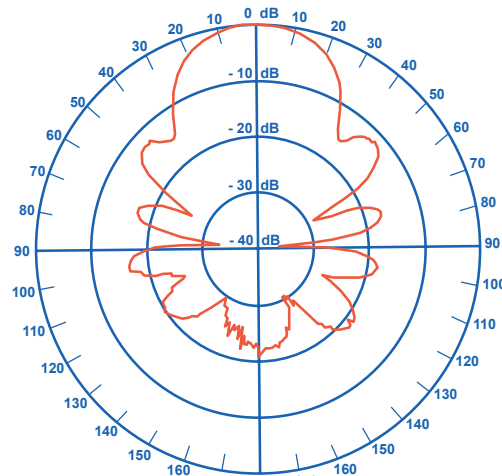
Mechanical data

Connector	: N
Overall length	: 4.89 m
Mass	: 5 kg
Effective wind load	
- Horizontal polarization	: 0.24 m ²
- Vertical polarization	: 0.27 m ²
Approximate wind load (25 m/s - 55 mph)	
- Horizontal polarization	: 9.2 daN
- Vertical polarization	: 10.3 daN
Approximate wind load (45 m/s - 100 mph)	
- Horizontal polarization	: 29.6 daN
- Vertical polarization	: 33.3 daN

Radiation patterns



E plane



H plane