

# 44 elements PRO-XL antenna

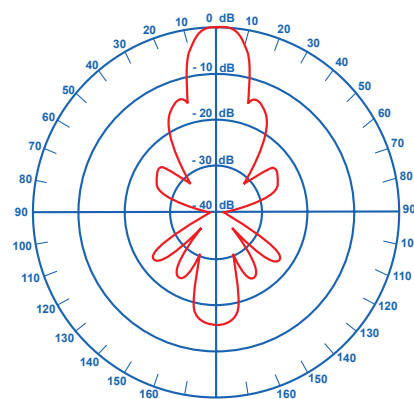
## 430 to 440 MHz

## Part Nr. 220344



### Electrical data

Effective electrical length .....	: 10.99 $\lambda$
Isotropic gain .....	: 20.2 dBi
Aperture angle @ -3 dB	
- E-plane .....	: 2 x 8.5°
- H-plane .....	: 2 x 10.9°
First side lobe set	
- E-plane .....	: - 15.0 dB à 20°
- H-plane .....	: - 18.0 dB à 20°
Rear protection .....	: - 22.1 dB
Average stray radiation	
- E-plane .....	: - 39 dB
- H-plane .....	: - 34 dB



220344 - 432 MHz

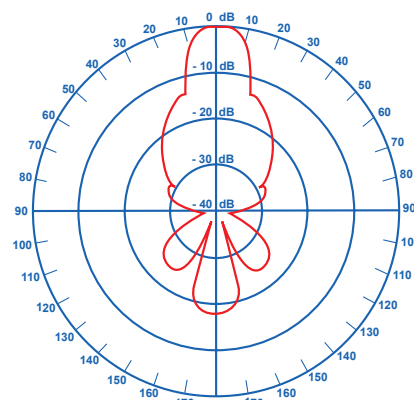
### Bandwidth

Gain @ -1 dB .....	: 428 à 442 MHz
Nominal impedance .....	: 50 $\Omega$
Impedance match bandwidth @ SWR <1.3/1.....	: 429 à 441 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)

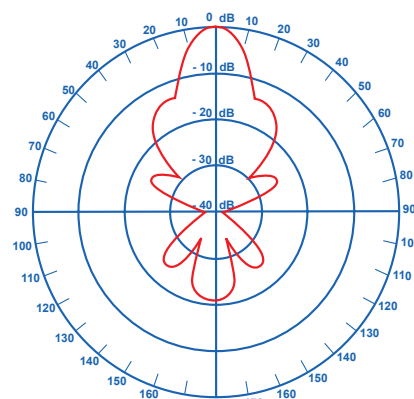
- E plane - Electrical distance .....	: 3.0 $\lambda$
- Pratical distance .....	: 2.1 m
- H plane - Electrical distance .....	: 13.0 $\lambda$
- Pratical distance .....	: 2.1 m



220344 - 435 MHz

### Mechanical data

Connector .....	: N
Overall length .....	: 7.59 m
Mass .....	: 16.2 kg
Effective wind load	
- Horizontal polarization .....	: 0.13 m <sup>2</sup>
- Vertical polarization .....	: 0.25 m <sup>2</sup>
Approximate wind load (25 m/s - 55 mph)	
- Horizontal polarization .....	: 15.9 daN
- Vertical polarization .....	: 23.7 daN
Approximate wind load (45 m/s - 100 mph)	
- Horizontal polarization .....	: 52.4 daN
- Vertical polarization .....	: 76.1 daN



220344 - 438.5 MHz

