

# 25 elements Yagi antenna

## 2300 to 2330 MHz

## Part Nr. 20725



### Electrical data

#### Radiation at 2320 MHz

Effective electrical length .....	: 9.67 $\lambda$
Isotropic gain .....	: 18.2 dBi
Aperture angle @ -3 dB	
- E-plane .....	: 2 x 7.4°
- H-plane .....	: 2 x 7.6°
First side lobe set	
- E-plane .....	: - 11 dB @ 22°
- H-plane .....	: - 9.6 dB @ 22°
Rear protection .....	: - 27 dB
Average stray radiation	
- E-plane .....	: - 23 dB
- H-plane .....	: - 22 dB

### Bandwidth

Gain @ -1 dB .....	: 2200 to 2330 MHz
Nominal impedance .....	: 50 $\Omega$
Impedance match bandwidth @ SWR <1.3/1.....	: 2280 to 2330 MHz
Acceptable RF power (continuous duty) .....	: 200 W

### Array of 2 or 4 antennas

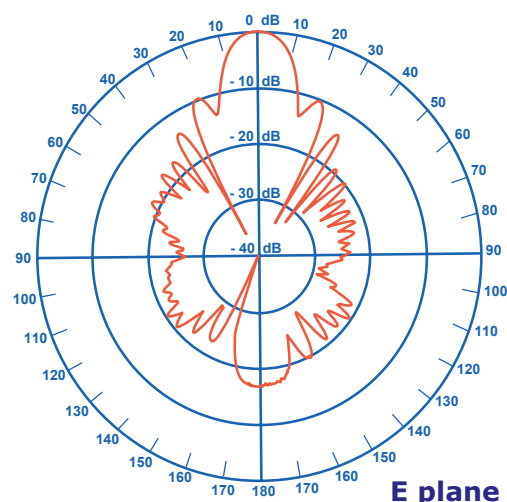
(optimized stacking distance. from center to center of elements. for minimal side lobe radiation)

- E plane - Electrical distance .....	: 3.33 $\lambda$
- Pratical distance .....	: 0.43 m
- H plane - Electrical distance .....	: 3.33 $\lambda$
- Pratical distance .....	: 0.43 m

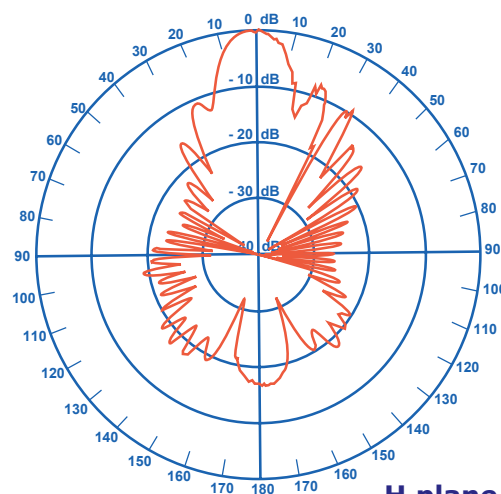
### Mechanical data

Connector .....	: N
Overall length .....	: 1.45 m
Mass .....	: 0.95 kg
Effective wind load	
- Horizontal polarization .....	: 0.056 m <sup>2</sup>
- Vertical polarization .....	: 0.032 m <sup>2</sup>
Approximate wind load (25 m/s - 55 mph)	
- Horizontal polarization .....	: 2.2 daN
- Vertical polarization .....	: 1.2 daN
Approximate wind load (45 m/s - 100 mph)	
- Horizontal polarization .....	: 6.9 daN
- Vertical polarization .....	: 4.0 daN

### Radiation patterns



E plane



H plane

