

35 elements Yagi antenna

1240 to 1260 MHz

Part Nr. 20636



Electrical data

Radiation at 1255 MHz

Effective electrical length : 12.83 λ

Isotropic gain : 20.4 dBi

Aperture angle @ -3 dB

- E-plane : 2 x 7.9°

- H-plane : 2 x 8.1°

First side lobe set

- E-plane : - 17.5 dB @ 22°

- H-plane : - 16.5 dB @ 22°

Rear protection : - 22.5 dB

Average stray radiation

- E-plane : - 35 dB

- H-plane : - 30 dB

Bandwidth

Gain @ -1 dB : 1205 to 1271 MHz

Nominal impedance : 50 Ω

Impedance match bandwidth @ SWR <1.3/1..... : 1251 to 1267 MHz

Acceptable RF power (continuous duty) : 300 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 : 3.40 λ

- Pratical distance : 0.82 m

- H plane - Electrical distance : 3.40 λ

- Pratical distance : 0.82 m

Mechanical data

Connector : N

Overall length : 3.07 m

Mass : 2.5 kg

Effective wind load

- Horizontal polarization : 0.13 m²

- Vertical polarization : 0.11 m²

Approximate wind load (25 m/s - 55 mph)

- Horizontal polarization : 5.0 daN

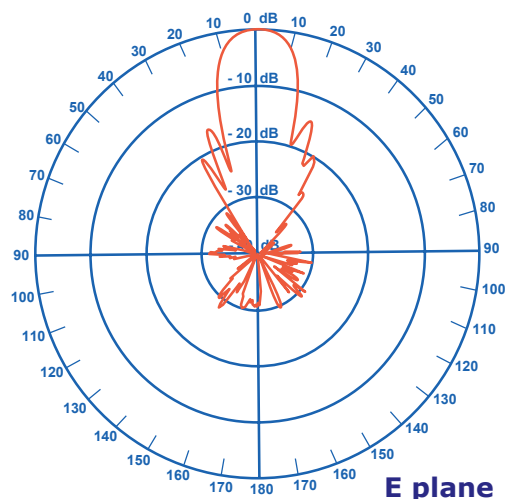
- Vertical polarization : 4.2 daN

Approximate wind load (45 m/s - 100 mph)

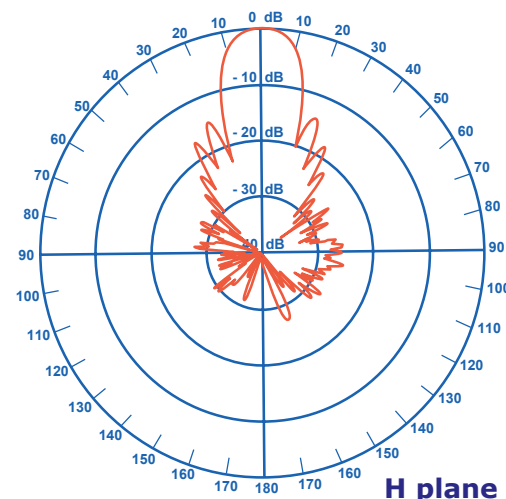
- Horizontal polarization : 16.1 daN

- Vertical polarization : 13.6 daN

Radiation patterns



E plane



H plane

