«Flat line»
Patch antenna

1240 to 1300 MHz

Part Nr. 20614

Electrical data

Radiation at 1296 MHz

Effective electrical length .....: 0.18λ
Isotropic gain .....: 13.8 dBi
Aperture angle @ -3 dB
- E-plane .....: 2 x 19.1°
- H-plane .....: 2 x 21.1°

First side lobe set
- E-plane .....: - 15 dB @ 65°
- H-plane .....: - 25 dB @ 80°

Rear protection ..... : - 30 dB
Average stray radiation
- E-plane .....: - 20 dB
- H-plane .....: - 25 dB

Bandwidth

Gain @ -1 dB .....: 1240 to 1300 MHz
Nominal impedance ..... : 50 Ω
Impedance match bandwidth @ SWR <1.3/1..... : 1240 to 1300 MHz
Acceptable RF power (CW/FM/PSK) ..... : 150 W

Array of 2 or 4 antennas

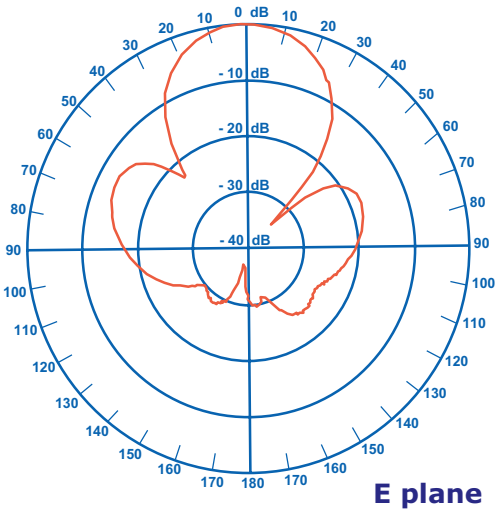
(optimized stacking distance. from center to center of elements. for minimal side lobe radiation)

- E plane - Electrical distance .....: 1.53 λ
  - Pratical distance ..... : 0.35 m
- H plane - Electrical distance ..... : 1.73 λ
  - Pratical distance ..... : 0.40 m

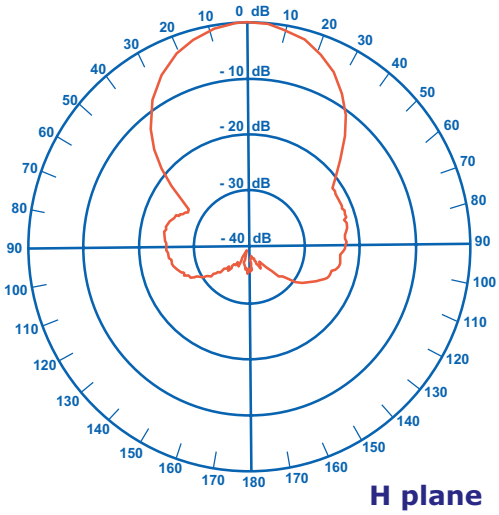
Mechanical data

Connector ..... : N
Overall length .....: 300 x 390 x 50 mm
Mass ..... : 0.5 kg
Effective wind load ..... : 0.11 m²
Approximate wind load (25 m/s - 55 mph) .....: 4.1 daN
Approximate wind load (45 m/s - 100 mph) .....: 13.3 daN

Radiation patterns



E plane



H plane

«Flat line»
Patch antenna

430 to 440 MHz

Part Nr. 20901

Electrical data

Radiation at 435 MHz

Effective electrical length .....: 0.06λ
Isotropic gain .....: 8.0 dBi
Aperture angle @ -3 dB
- E-plane .....: 2 x 38.8°
- H-plane .....: 2 x 41.0°

First side lobe set
- E-plane .....: -
- H-plane .....: -

Rear protection ..... : - 15 dB
Average stray radiation
- E-plane .....: - 20 dB
- H-plane .....: - 20 dB

Bandwidth

Gain @ -1 dB .....: 425 to 445 MHz
Nominal impedance ..... : 50 Ω
Impedance match bandwidth @ SWR <1.3/1..... : 430 to 440 MHz
Acceptable RF power (CW/FM/PSK) ..... : 150 W

Array of 2 or 4 antennas

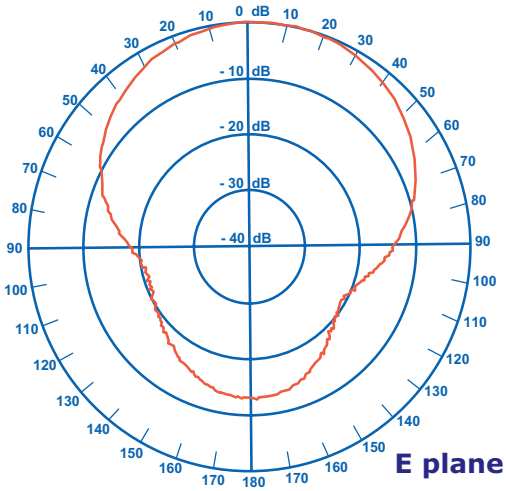
(optimized stacking distance. from center to center of elements. for minimal side lobe radiation)

- E plane - Electrical distance .....: 0.57 λ
  - Pratical distance ..... : 0.38 m
- H plane - Electrical distance ..... : 0.53 λ
  - Pratical distance ..... : 0.37 m

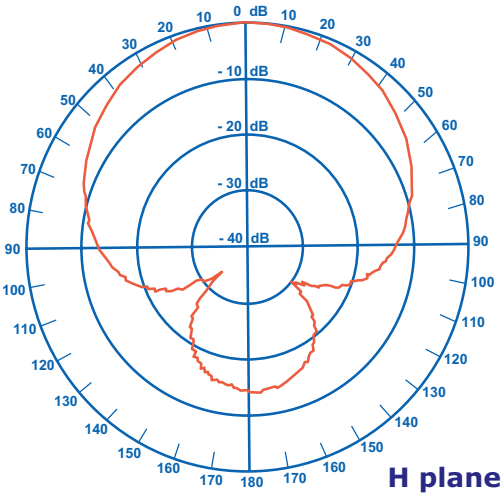
Mechanical data

Connector ..... : N
Overall length .....: 300 x 390 x 50 mm
Mass ..... : 0.5 kg
Effective wind load ..... : 0.11 m²
Approximate wind load (25 m/s - 55 mph) .....: 4.1 daN
Approximate wind load (45 m/s - 100 mph) .....: 13.3 daN

Radiation patterns



E plane



H plane