



keonn

Modular RFID
Components

Advantenna-p22 TM

RFID UHF pencil beamantenna





Benefits:

- 60° beamwidth in two directions
- High gain
- Very thin form factor

Applications:

- POS systems
- Real-time inventory systems
- Magic mirrors
- Doors and corridors

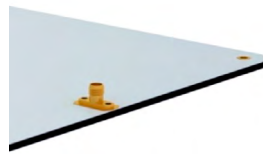
Product overview

Advantenna-p22 is a compact RFID UHF 2x2 elements patch antenna with circular polarization and a radiation pattern characterized by a 60°/60° beamwidth.

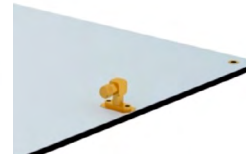
This radiation pattern makes this antenna ideal for many RFID applications such as real-time inventory systems, magic mirrors and tracking through doors and corridors.

Holder available specially designed for this model of antenna: [AdvanHolder-p22](#)

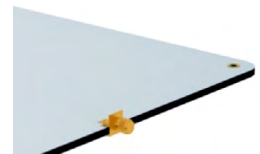
Connector options



Flange straight

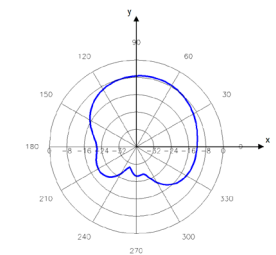
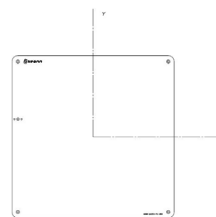
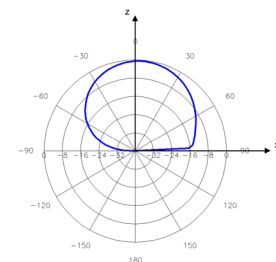
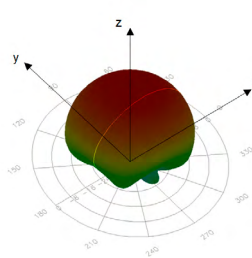


Flange right angle



Edge mount

Antenna radiation pattern



*Front-to-back ratio not drawn

Tecnical specifications



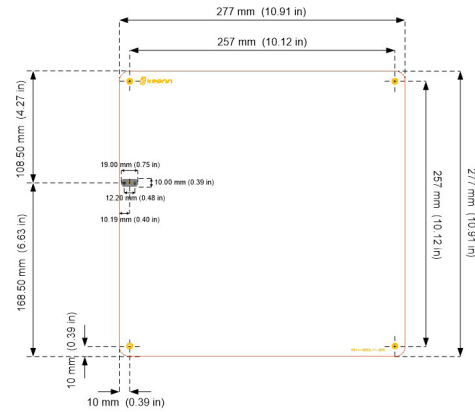
| | |
|----------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Operating Frequency EU Version | 865 - 868 MHz (ETSI EN 302 208) |
| Operating Frequency US Version | 902 - 928 MHz (FCC part 15) |
| Antenna Technology | Patch |
| Radiation pattern | Pencil beam |
| Gain | EU version 7.6 dBiC (Typical), 7.7 dBiC (Max) 5.3 dBIL* US version 7.7 dBiC (Typical), 8.0 dBiC (Max), 5.8 dBIL* |
| VSWR | < 1.4:1 |
| Beam width (AZ / EL) | 60° / 60° |
| Sidelobe level | < -15 dB |
| Front-to-Back Ratio | < -20 dB |
| Polarization | Circular - RHCP (Right Hand Circular Polarization) |
| Axial Ratio | EU version* At Boresight 0.6 dB At 3dB Beamwidth 0.5 dB (Typical), 2.5 dB (Max) US version* At Boresight 1.7 dB At 3dB Beamwidth 1.7 dB (Typical), 3.6 dB (Max) |
| Input Impedance | 50 Ω |
| Connector | SMA or MCX Flange, flange right angle, or edge mount (on the long side of the antenna) |
| Regulation | ROHS - EU Directive 2015/863 WEEE - EU Directive 2012/19/EU REACH - EC No 1907/2006 ETSI EN 302 208 |
| IP rating | Indoor antenna IP68 Dust resistant, even in high concentration Immersion resistant (up to 1 m for up to 30 minutes) |
| Temperature range | -20°C to +80°C |
| Size excluding connector | 277 mm x 277 mm x 3.3 mm 10.9 inches x 10.9 inches x 0.13 inches |
| Size with edge mount connector | 277 mm x 277 mm x 15 mm 10.9 inches x 10.9 inches x 0.6 inches |
| Size with flange mount connector | 277 mm x 277 mm x 8 mm 10.9 inches x 10.9 inches x 0.3 inches |
| Antenna weight | 470 g |

*Measured at the center of the band

Mechanical specifications



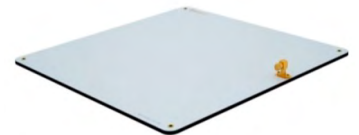
With flange straight or flange right angle connector



Holes $\varnothing = 3.3$ mm (0.13 in)

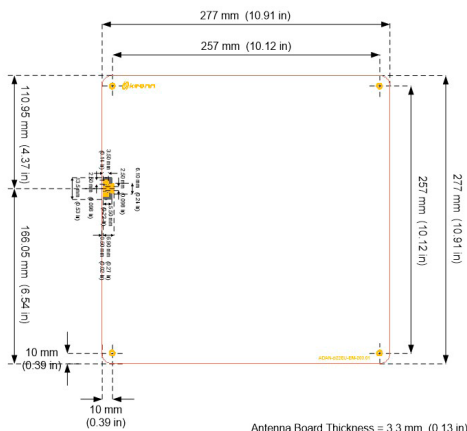


View from the side that does not radiate



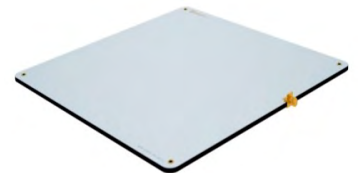
View from the side that radiates

With edge mount connector*



Antenna Board Thickness = 3.3 mm (0.13 in)

Holes $\varnothing = 3.3$ mm (0.13 in)



View from the side that does not radiate

View from the side that radiates

* EU version available only

Product codes for ordering

| ADAN-p22 | FF | - | CS | COR | CT | - | mmm | |
|----------|----|---|----|-----|-----|---|-----|-----------------------------------------------------------------------|
| | | | | | | | | FF = frequency band |
| | EU | | | | | | | 865,6 MHz - 867,6 MHz |
| | US | | | | | | | 902,0 MHz - 928,0 MHz |
| | | | | | | | | Connector shape |
| | | | FL | | | | | Flange straight |
| | | | FR | | | | | Flange right angle |
| | | | EM | | | | | Edge mount (EU version only) |
| | | | | | | | | Connector orientation (only for right angle SMA connector) |
| | | | | | | | | Default orientation |
| | | | | 90 | | | | Rotated 90° counterclockwise |
| | | | | 180 | | | | Rotated 180° counterclockwise |
| | | | | 270 | | | | Rotated 270° counterclockwise |
| | | | | | | | | Connector type |
| | | | | | SMA | | | SMA connector |
| | | | | | MCX | | | MCX connector (only available in edge mount and flange straight) |
| | | | | | | | | Model |
| | | | | | | | 200 | Model number |

Examples:

ADAN-p22EU-FLSMA-200:

- Advantenna-**p22**
- Frequency band : 865,6 MHz - 867,6 MHz
- **Flange straight** connector
- Default connector orientation
- **SMA** connector
- Model **200**

ADAN-p22EU-EMSMA-200:

- Advantenna-**p22**
- Frequency band : 865,6 MHz - 867,6 MHz
- **Edge mount** connector
- Default connector orientation
- **SMA** connector
- Model **200**

ADAN-p22US-FR270SMA-200:

- Advantenna-**p22**
- Frequency band : 902,0 MHz - 928,0 MHz
- **Flange right angle** connector
- Connector rotated 270° counterclockwise
- **SMA** connector
- Model **200**

Disposal of the product

Do not dispose the product in municipal or household waste. Please check your local regulations for disposal/ recycle of electronic products.





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