



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

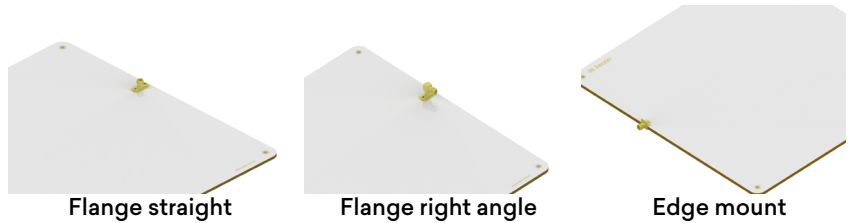
Product overview

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.

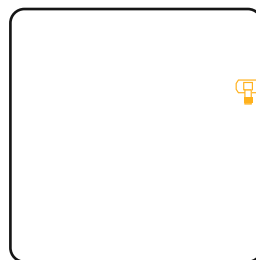
Holder available specially designed for this model of antenna: [AdvanHolder-p22](#)

Connector options

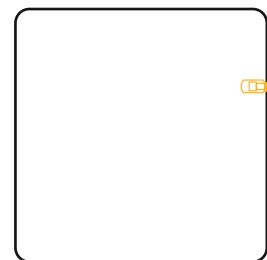


Flange right angle connector with rotation

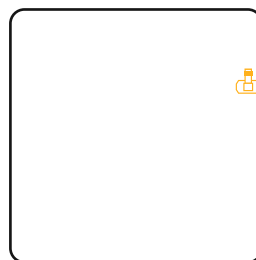
Default



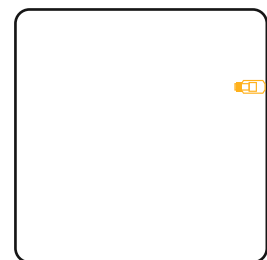
90 degrees



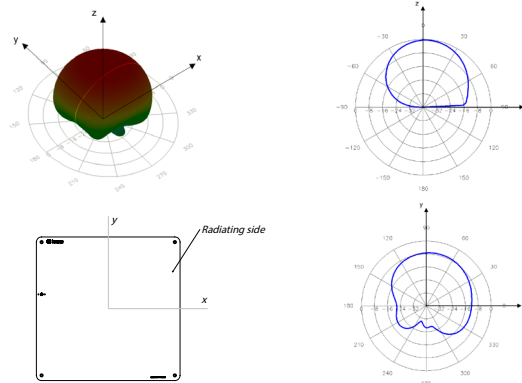
180 degrees



270 degrees



Antenna radiation pattern



*Front-to-back ratio not drawn

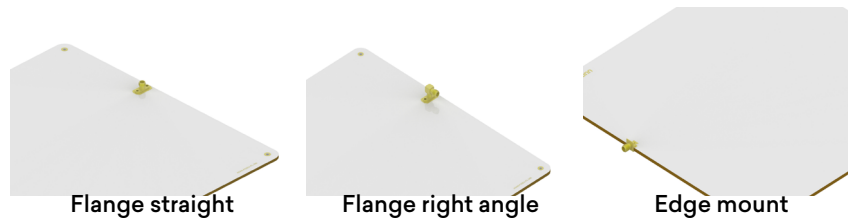
Technical specifications

| | |
|----------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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 | < 1.5:1 (Typical) |
| Beam width (AZ / EL) | 60° / 60° |
| Sidelobe level | < -15 dB |
| Front-to-Back Ratio | < -20 dB |
| Polarization | Circular - LHCP (Left 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 IP62** |
| 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 9 mm 10.9 inches x 10.9 inches x 0.4 inches |
| Size with flange right angle connector | 277 mm x 277 mm x 16.4 mm 10.9 inches x 10.9 inches x 0.6 inches |
| Size with straight angle connector | 277 mm x 277 mm x 12.9 mm 10.9 inches x 10.9 inches x 0.5 inches |
| Antenna weight | 470 g |

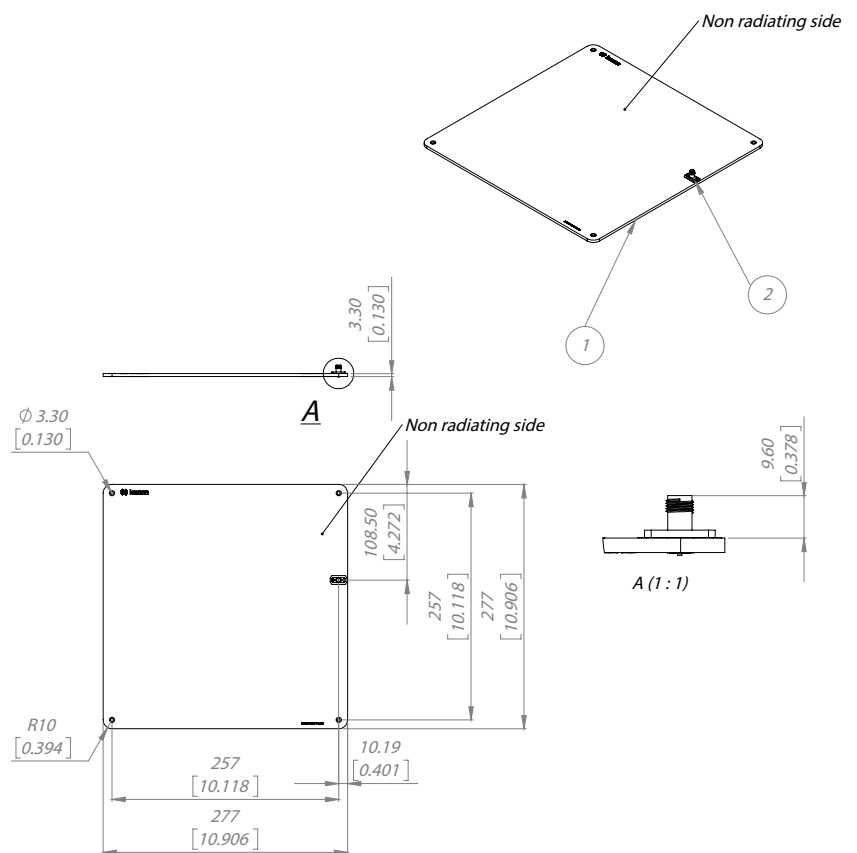
*Measured at the center of the band

** IP rating in this case indicates the conditions that the antenna can withstand at specific times and, afterwards, continue working normally, they are not conditions under which it can work permanently.

Mechanical specifications

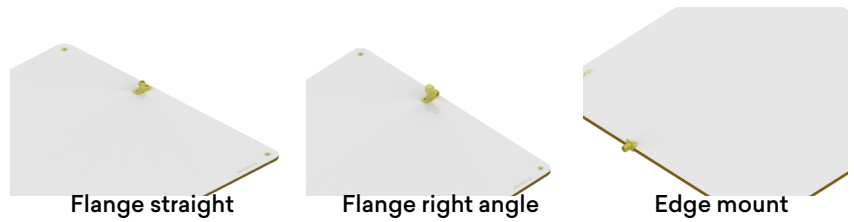


Flange straight connector (EU)

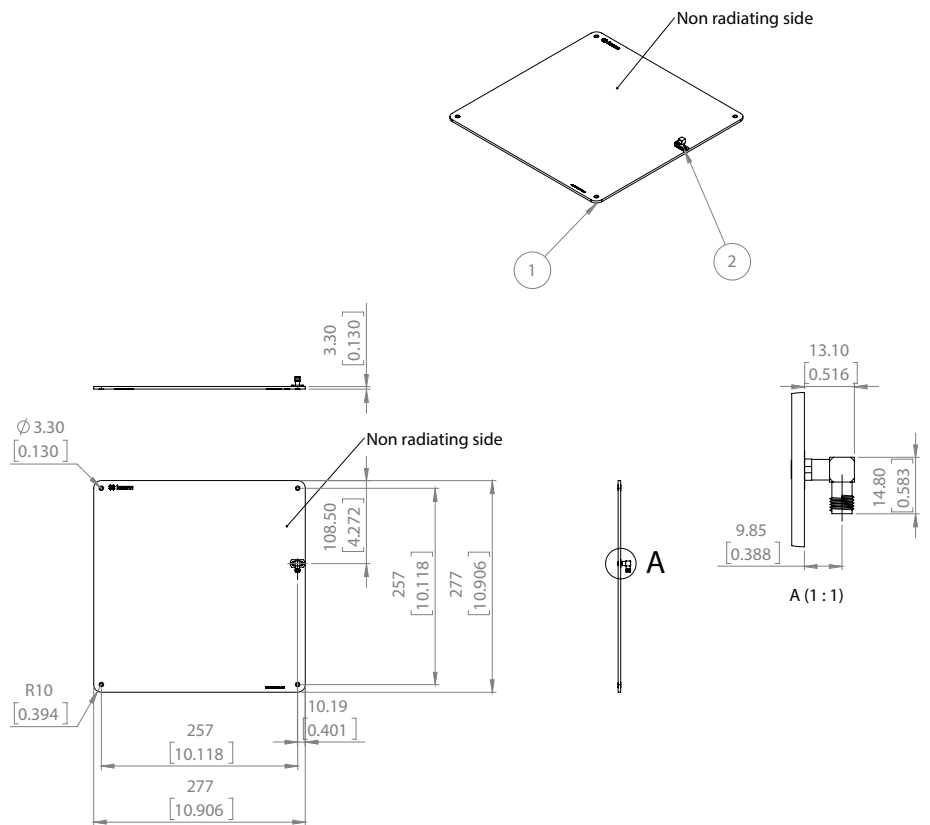


Units in millimeters and [inches]

Mechanical specifications

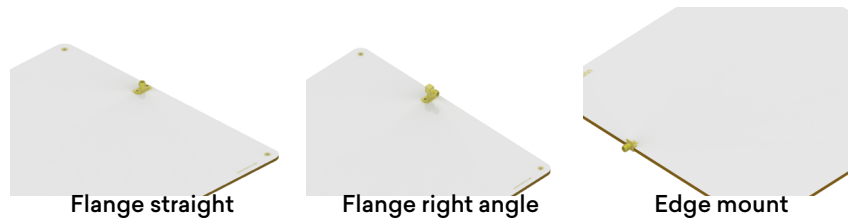


Flange right connector (EU)

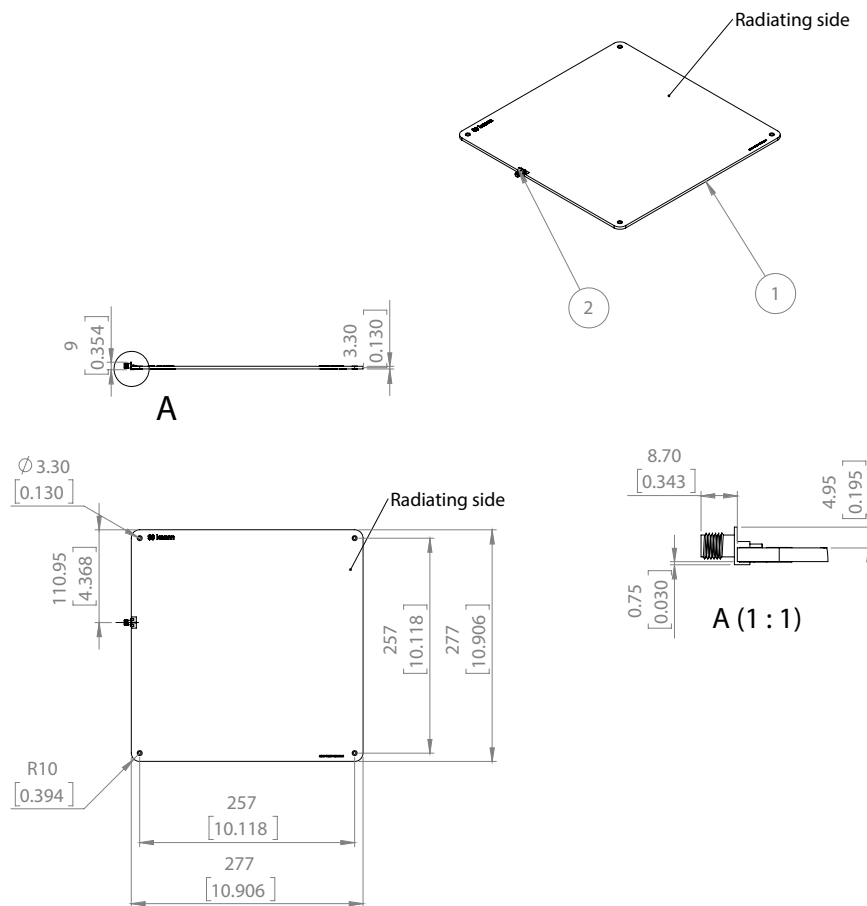


Units in millimeters and [inches]

Mechanical specifications

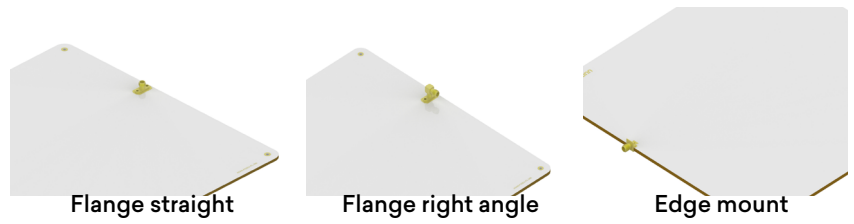


Edge mount connector (only available EU version)

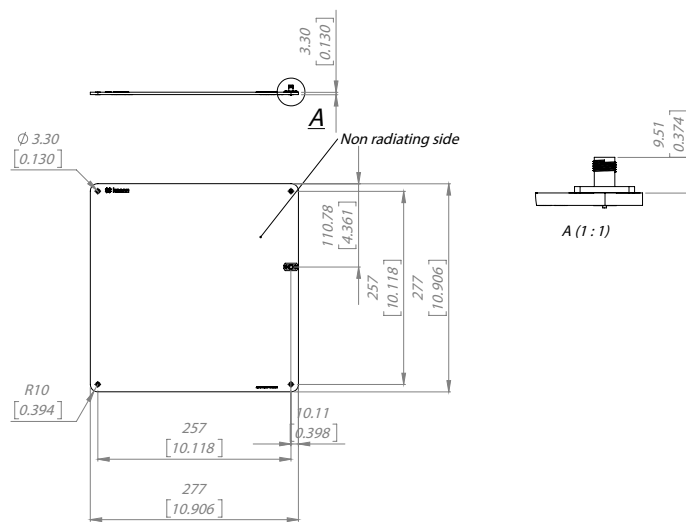
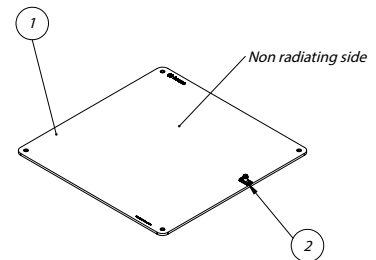


Units in millimeters and [inches]

Mechanical specifications

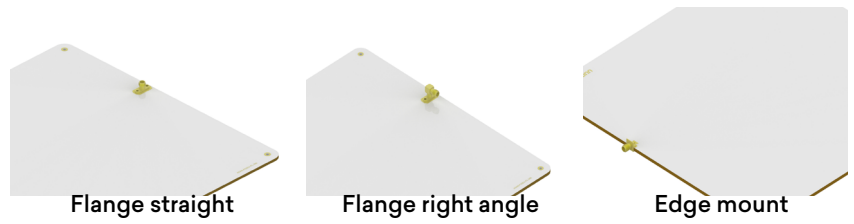


Flange straight connector (US)

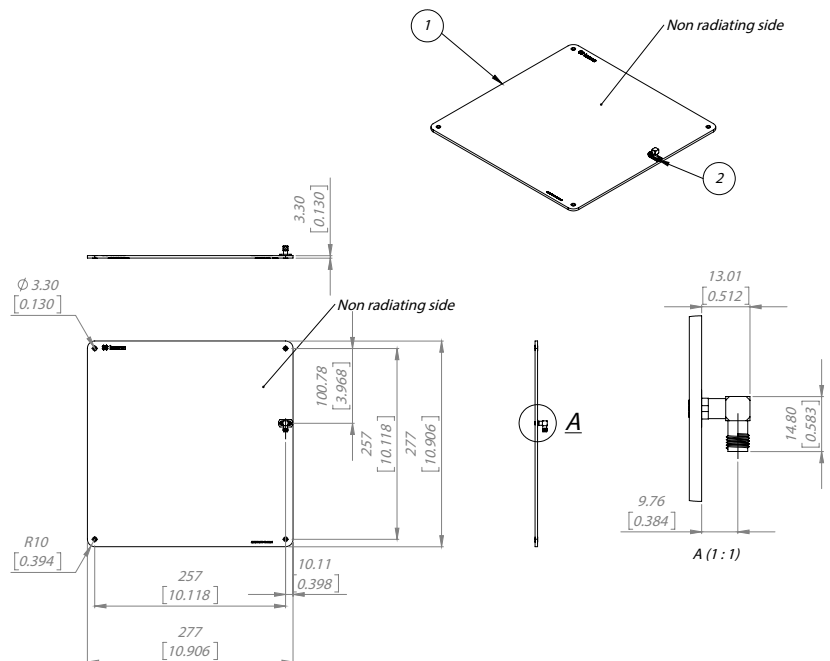


Units in millimeters and [inches]

Mechanical specifications



Flange right angle connector (US)



Units in millimeters and [inches]

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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