



# keonn

Modular RFID  
Components

## Advantenna-p22 <sup>TM</sup>

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

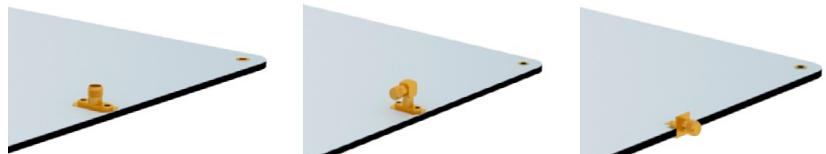
### Product overview

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



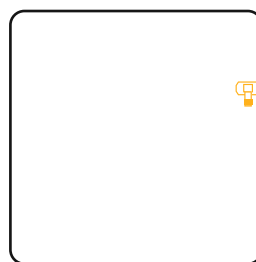
Flange straight

Flange right angle

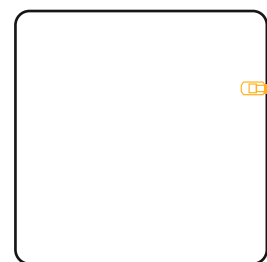
Edge mount

### Flange right angle connector with rotation

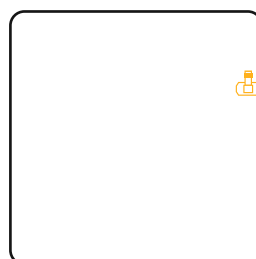
Default



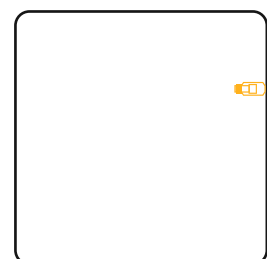
90 degrees



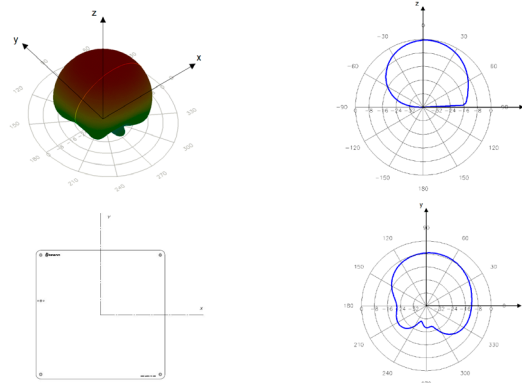
180 degrees



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	<b>EU version</b> 7.6 dBiC (Typical), 7.7 dBiC (Max) 5.3 dBil* <b>US version</b> 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 - LHCP (Left Hand Circular Polarization)
Axial Ratio	<b>EU version*</b> At Boresight 0.6 dB At 3dB Beamwidth 0.5 dB (Typical), 2.5 dB (Max) <b>US version*</b> 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**
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

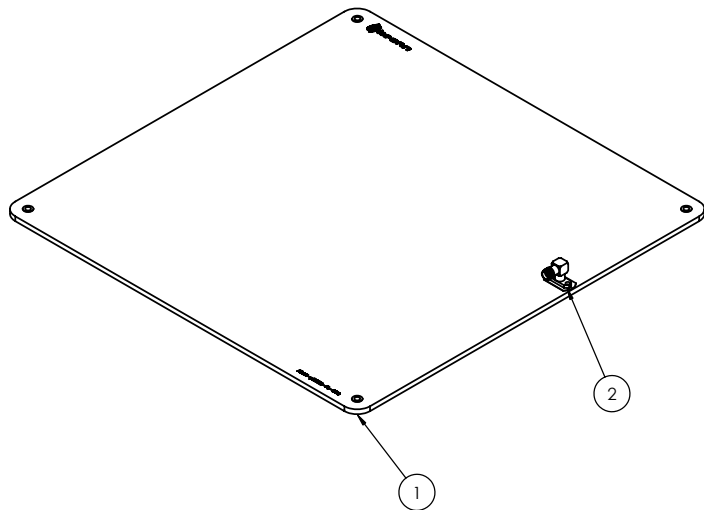
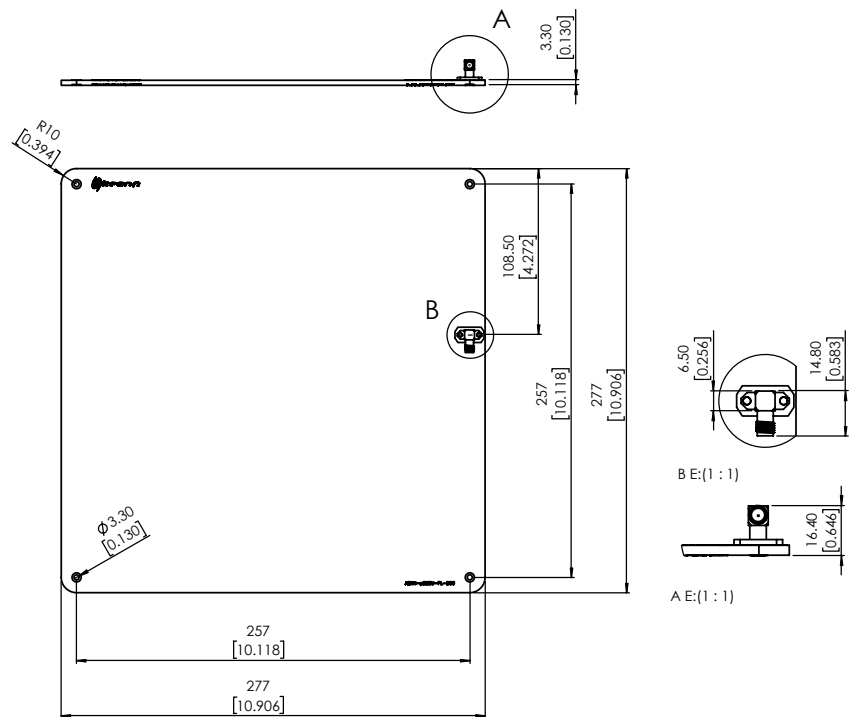
\*Measured at the center of the band

\*\* 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



With flange right angle connector

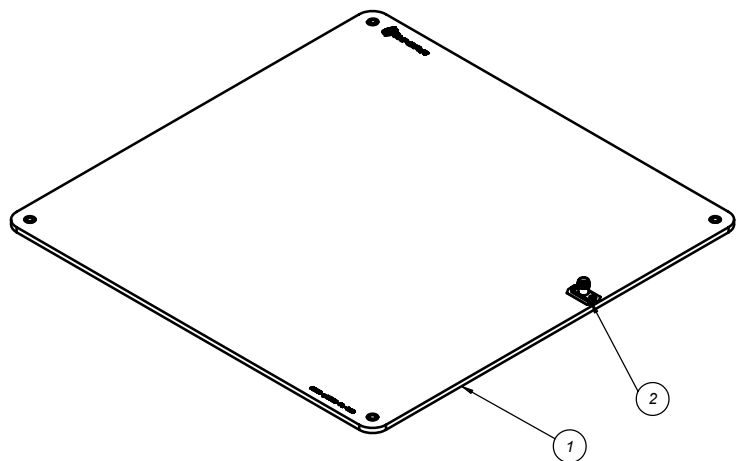
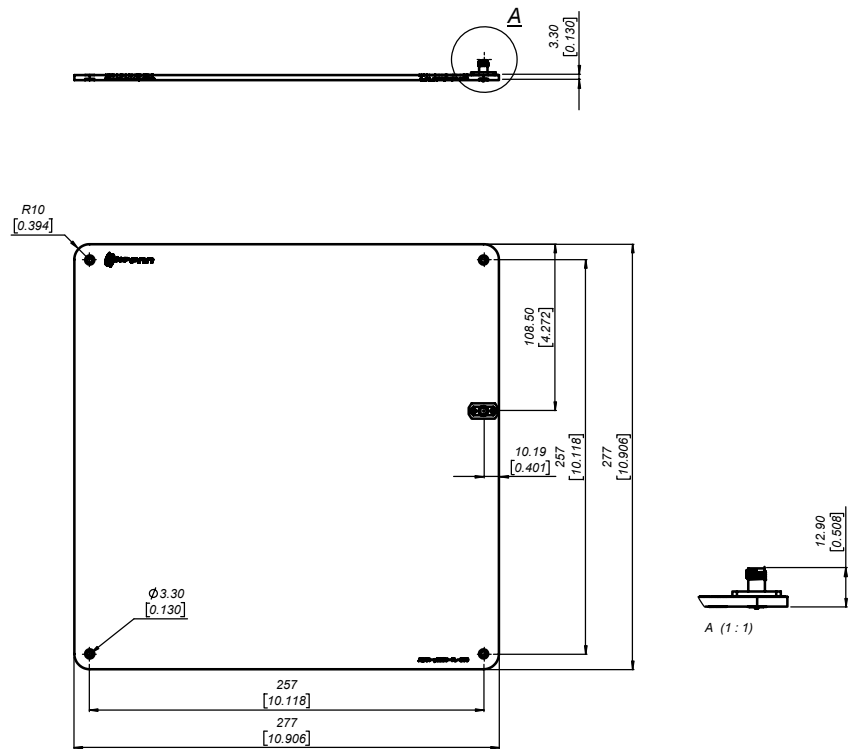


Units in millimeters and [inches]

### Mechanical specifications



With flange straight angle connector

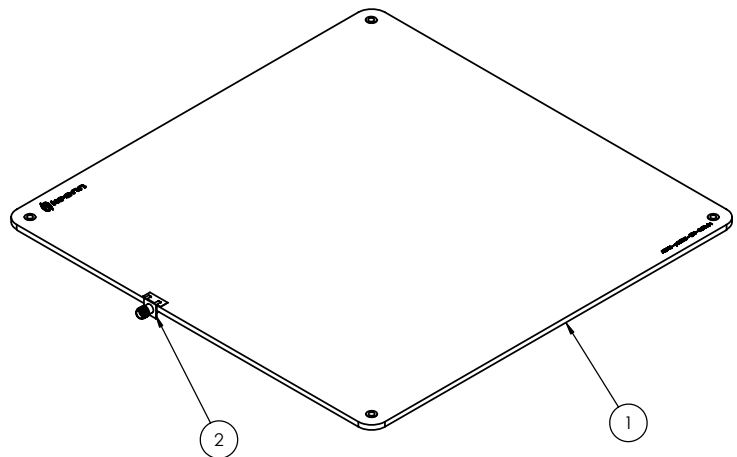
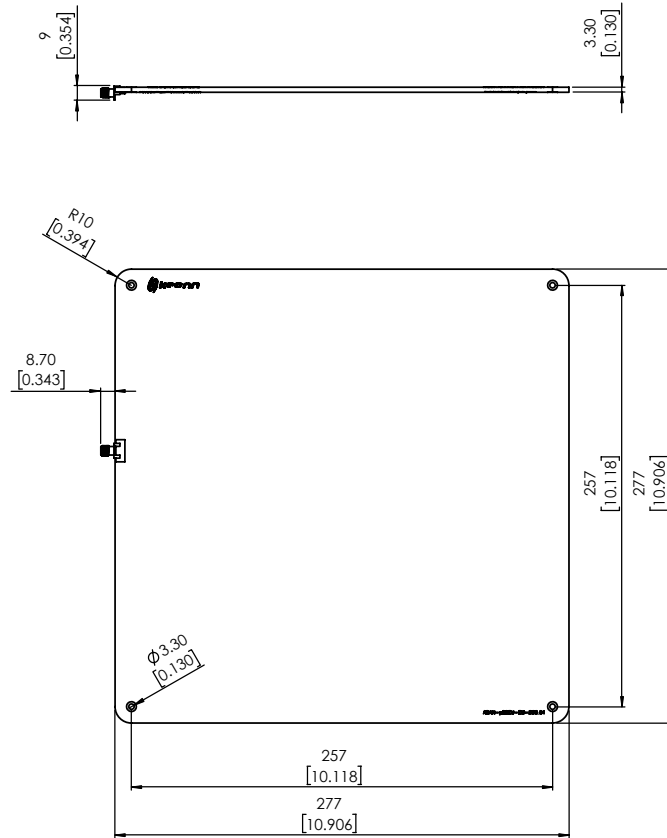


Units in millimeters and [inches]

### Mechanical specifications



With edge mount connector\*



\* EU version available only

Units in millimeters and [inches]

### Product codes for ordering

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