

## Product overview

Advantenna-p13 is a compact RFID UHF antenna with circular polarization and a radiation pattern characterized by a 40° beam width in the direction of the antenna long edge and 90° in the direction of the antenna short edge. This radiation pattern makes this antenna ideal for many RFID applications such as:

- Loss prevention systems
- Portals, tunnels
- Corridors
- Doors

## Connector options



Flange straight



Flange right angle



Edge mount

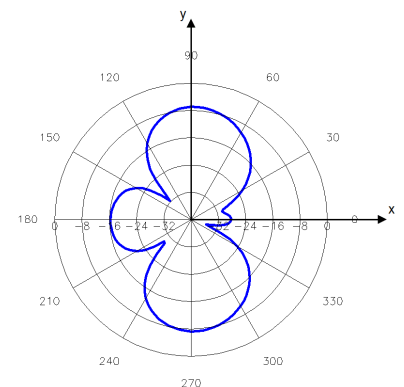
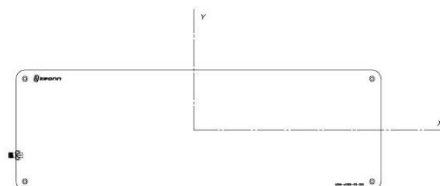
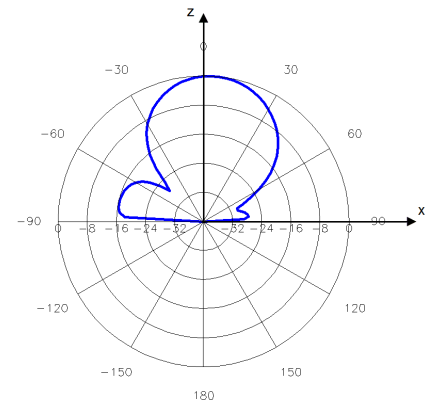
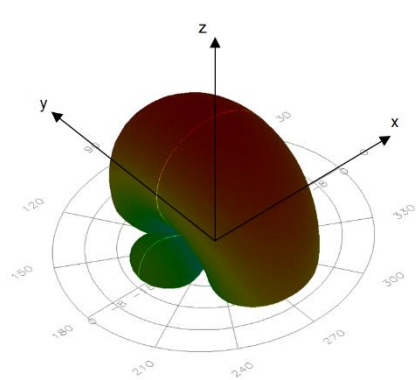
## Benefits:

- Slightly narrow beam in the long edge
- Wide beam in the short edge
- High gain
- Very thin form factor
- Cost effective

## Applications:

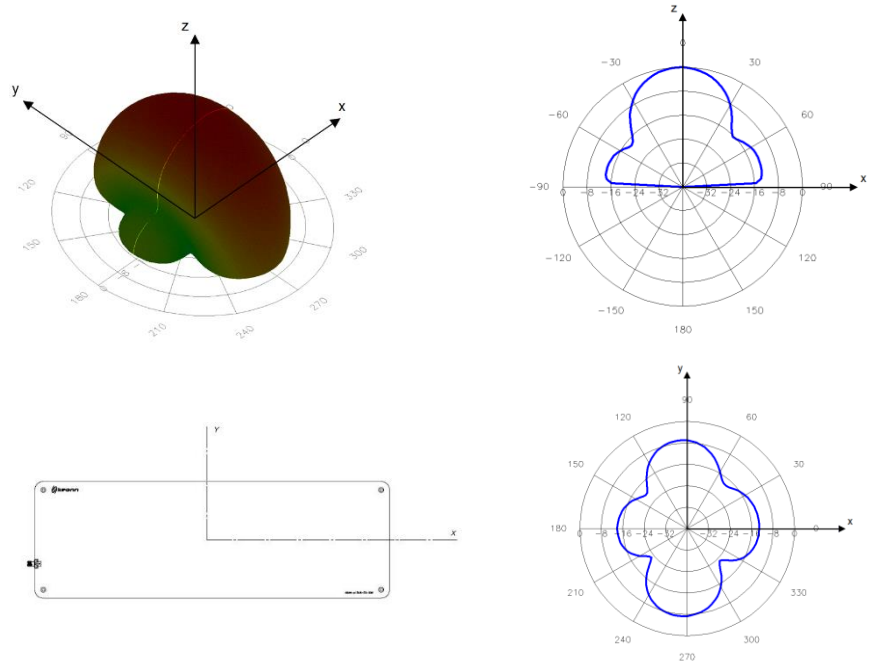
- Loss prevention systems
- Portals
- Doors and corridors
- Tunnels

## Antenna radiation pattern for 865,6 MHz - 867,6 MHz frequency band:





## Antenna radiation pattern for 902 - 928 MHz frequency band:



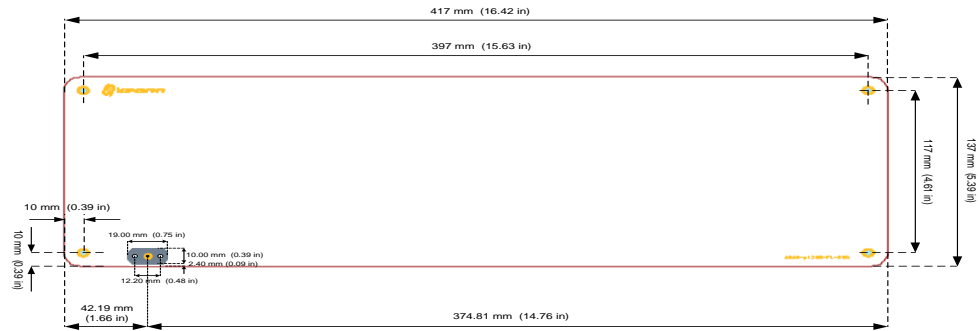
## Specifications

Operating Frequency EU Version	865 - 868 MHz (ETSI EN 302 208)
Operating Frequency US Version	902 - 928 MHz (FCC part 15)
Operating Detection distance	Up to 4.0 m
Radiation pattern	Fan beam
Gain	6.8 dBi (EU version), 6.9 dBi (US version)
Beam width	40° / 90°
Sidelobe level	< -15 dB
Polarization	Circular RHCP (Right Hand Circular Polarization) – Models with Flange and Edge mount connector on the long side LHCP (Left Hand Circular Polarization) – Models with Edge mount connector on the short side
Input Impedance	50 Ω
Connector	SMA or MCX Flange, flange right angle, or edge mount In case of edge mount can be mounted on the long side or on the short side of the antenna
IP rating	IP65, IP68 Dust resistant, even in high concentration Resistant to normal water jets for at least 3 minutes Immersion resistant (up to 1m for up to 30 minutes)
Temperature range	-20°C to +80°C
Size excluding connector	417 mm x 137 mm x 3.3 mm 16.3 inches x 5.4 inches x 0.13 inches
Size with edge mount connector	417 mm x 137 mm x 8 mm 16.3 inches x 5.4 inches x 0.3 inches
Size with flange mount connector	417 mm x 137 mm x 15 mm 16.3 inches x 5.4 inches x 0.6 inches
Antenna weight	350 g



## Mechanical specifications

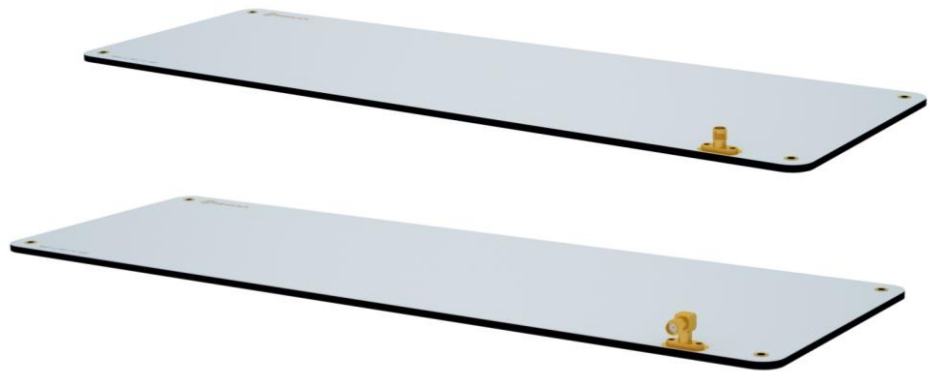
With flange straight or flange right angle connector



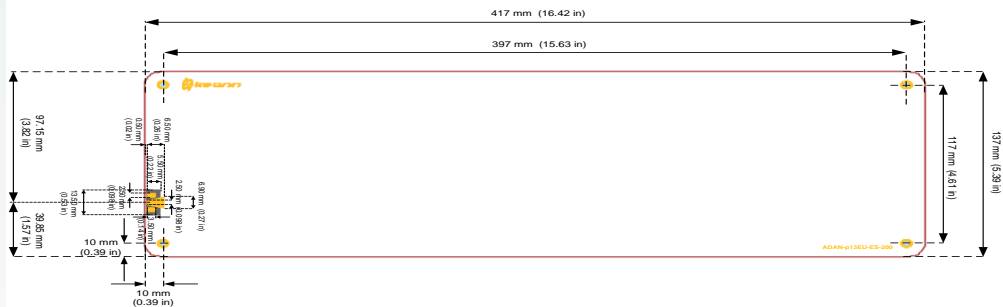
View from the side that radiates

Antenna Board Thickness = 3.3 mm (0.13 in)

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



With edge mount connector in the short side



View from the side that radiates

Antenna Board Thickness = 3.3 mm (0.13 in)

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





## Product codes for ordering

ADAN-p13	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>
			ES					Edge mount, at the short side of the antenna
			FL					Flange straight
			FR					Flange right angle
								<b>Connector orientation</b> (only for right angle SMA connector)
								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-p13EU-ESSMA-200:**
  - Advantenna-**p13**
  - Frequency band : 865,6 MHz - 867,6 MHz
  - **Edge mount** connector, placed at the short side of the antenna
  - **SMA** connector
  - Model **200**
- **ADAN-p13US-FRSMA-200:**
  - Advantenna-**p13**
  - Frequency band : 902,0 MHz - 928,0 Mhz
  - **Flange right angle** connector
  - Default connector orientation
  - **SMA** connector
  - Model **200**
- **ADAN-p13EU-FR270SMA-200:**
  - Advantenna-**p13**
  - Frequency band : 865,6 MHz - 867,6 MHz
  - **Flange right angle** connector
  - Connector rotated 270° counterclockwise
  - **SMA** connector
  - Model **200**