

## Product overview

Advantenna-p33 is a compact RFID UHF Antenna with circular polarization and a radiation pattern characterized by a pencil beam shape (40°/40°) .

This radiation pattern makes this antenna ideal for many RFID applications such as overhead real-time inventory systems, magic mirrors and fitting rooms.

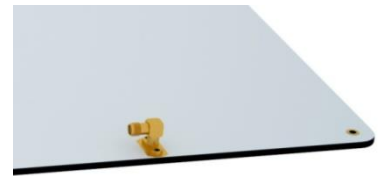
A set of Advantenna-p33 can be installed hanging from the ceiling in order to identify and locate tagged items in a given space in real-time.

In retail stores, Advantenna-p33 can be installed at the ceiling, over each fitting room. In this position, and thanks to its high directivity, the RFID system detects the RFID tags located in the corresponding fitting room, while minimizing the detection of items located in neighboring fitting rooms or in areas nearby.

## Connector options



Flange straight



Flange right angle

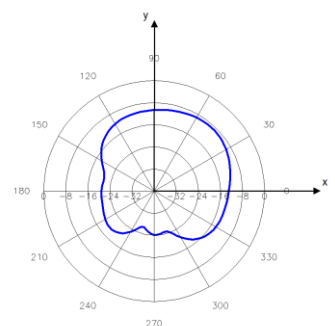
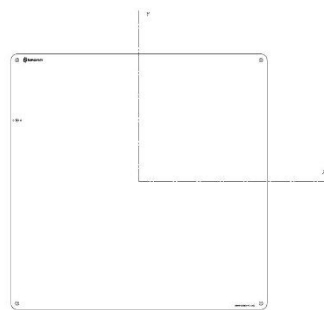
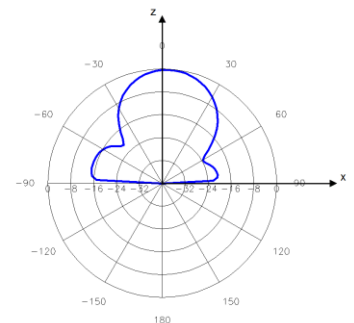
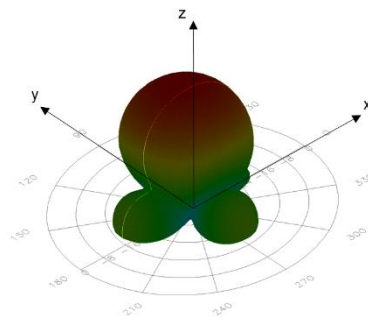
## Benefits:

- Narrow beam in two directions
- High gain
- Very thin form factor

## Applications:

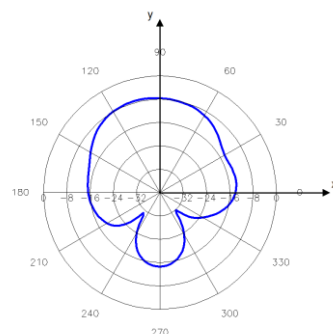
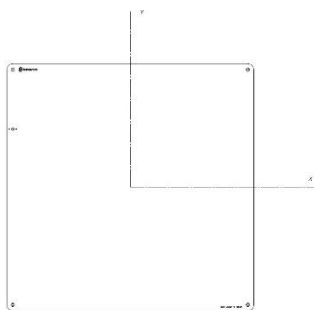
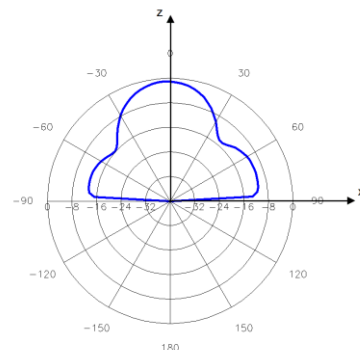
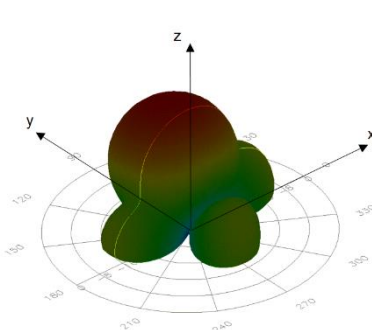
- Overhead real-time inventory systems
- Fitting rooms
- Magic mirrors
- Doors and corridors

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





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



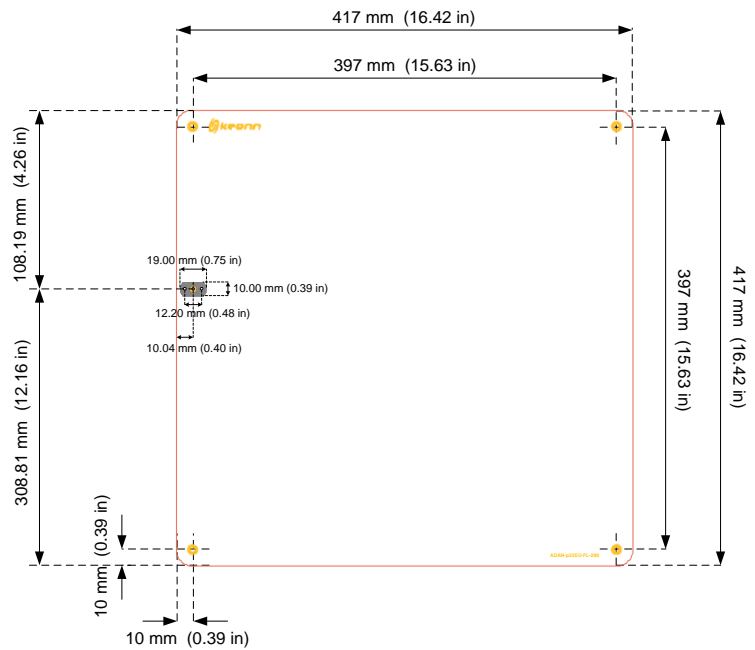
## Specifications

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 6 metres
Radiation pattern	Pencil beam
Beamwidth	40° / 40°
Gain	10.7 dBi (EU version), 10.6 dBi (US version)
Sidelobe level	< -15 dB
Polarization	Circular – RHCP (Right Hand Circular Polarization)
Input Impedance	50 Ω
Connector	female SMA or MCX Flange or flange right angle
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 417 mm x 3.3 mm 16.4 inches x 16.4 inches x 0.13 inches
Size with flange connector	417 mm x 417 mm x 15 mm 16.4 inches x 16.4 inches x 0.6 inches
Antenna weight	1050 g



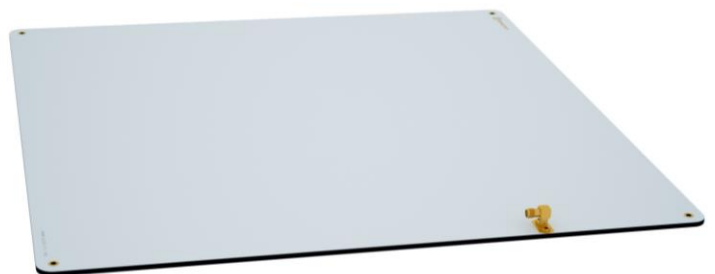
## Mechanical specifications

With flange straight or flange right angle connector



View from the side that radiates

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





## Product codes for ordering

ADAN-p33	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
								<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 flange straight)
								<b>Model</b>
							200	Model number

Examples:

- **ADAN-p33EU-FLSMA-200:**
  - Advantenna-**p33**
  - Frequency band : 865,6 MHz - 867,6 MHz
  - **Flange straight** connector
  - **SMA** connector
  - Model **200**
  
- **ADAN-p33US-FRSMA-200:**
  - Advantenna-**p33**
  - Frequency band : 902,0 MHz - 928,0 MHz
  - **Flange right angle** connector
  - Default connector orientation
  - **SMA** connector
  - Model **200**
  
- **ADAN-p33EU-FR270SMA-200:**
  - Advantenna-**p33**
  - Frequency band : 865,6 MHz - 867,6 MHz
  - **Flange right angle** connector
  - Connector rotated 270° counterclockwise
  - **SMA** connector
  - Model **200**