



## Benefits:

- Narrow beam in the endfire direction
- Wide beam in the broadside direction
- High gain
- Very thin form factor
- Cost effective

## Applications:

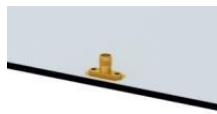
- Time keeping of sport events (marathons, etc.)
- Race timing
- Overhead loss prevention systems
- Portals
- Doors and corridors
- Toll systems
- Vehicle tracking

## Product overview

Advantenna-p16 is a compact RFID UHF antenna with circular polarization and a radiation pattern characterized by a 20° beam width in the endfire direction and a 90° beam width in the broadside direction. This radiation pattern makes this antenna ideal for many RFID applications such as:

- Time keeping of sport events, marathons, race timing
- Overhead loss prevention systems
- Portals
- Corridors
- Doors
- Toll systems
- Vehicle tracking

## Connector options



Flange straight



Flange right angle

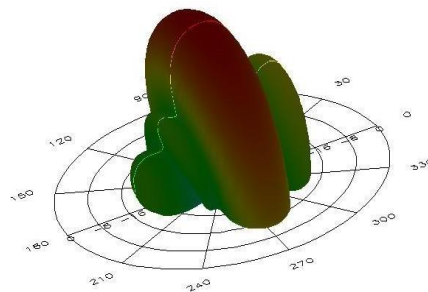


Edge mount

## 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 9 m
Radiation pattern	Fan beam
Gain	9.4 dBi (EU version), 9.3 dBi (US version)
Beam width	20° / 90°
Sidelobe level	< -15 dB
Polarization	Circular
Input Impedance	50 Ω
Connector	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	837 mm x 137 mm x 3.3 mm 32.9 inches x 5.4 inches x 0.13 inches
Size with flange connector	837 mm x 137 mm x 15 mm 32.9 inches x 5.4 inches x 0.6 inches
Size with edge mount connector	837 mm x 137 mm x 8 mm 32.9 inches x 5.4 inches x 0.3 inches
Antenna weight	725 g

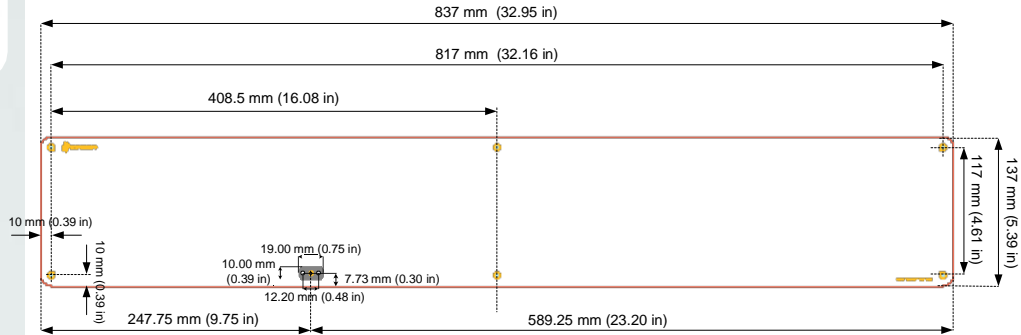
## Radiation pattern





## 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)

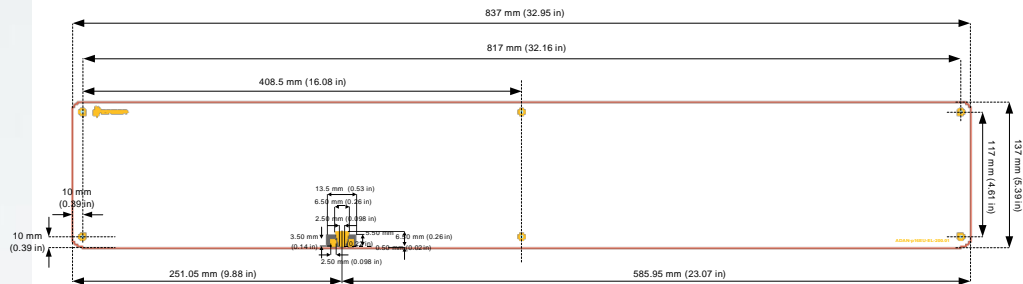
6 Holes  $\varnothing = 3.3$  mm (0.13 in)

2 Holes  $\varnothing = 2.5$  mm (0.10 in)

1 Holes  $\varnothing = 1.4$  mm (0.06 in)



### With edge mount connector



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-p16	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>
			EL					Edge mount, at the long 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-p16EU-ELSMA-200:**
  - Advantenna-**p16**
  - Frequency band : 865,6 MHz - 867,6MHz
  - **Edge mount** connector, placed at the long side of the antenna
  - **SMA** connector
  - Model **200**
  
- **ADAN-p16US-FRSMA-200:**
  - Advantenna-**p16**
  - Frequency band : 902,0 MHz - 928,0Mhz
  - **Flange right angle** connector
  - Default connector orientation
  - **SMA** connector
  - Model **200**
  
- **ADAN-p16EU-FR270SMA-200:**
  - Advantenna-**p16**
  - Frequency band : 865,6 MHz - 867,6MHz
  - **Flange right angle** connector
  - Connector rotated 270° counterclockwise
  - **SMA** connector
  - Model **200**