



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 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:

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

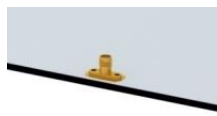
Benefits:

- Slightly narrow beam in the long edge
- Wide beam in the short edge
- 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

Connector options



Flange straight

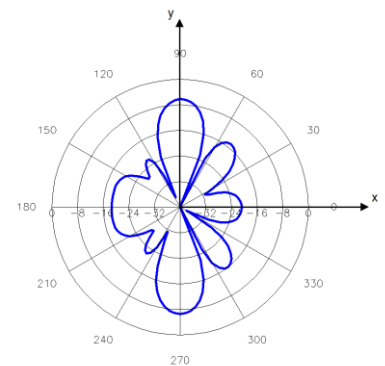
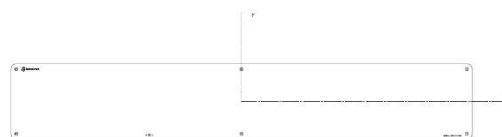
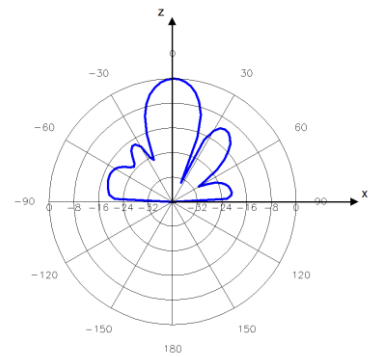
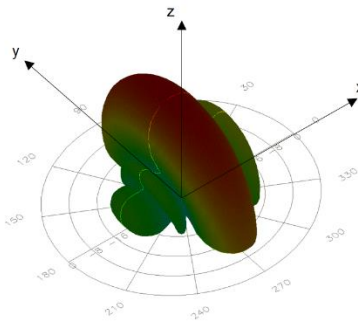


Flange right angle



Edge mount

Antenna radiation pattern





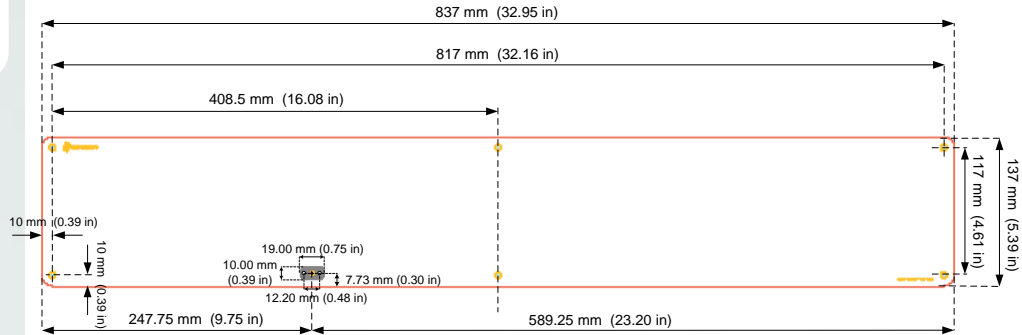
Specifications

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 - RHCP (Right Hand Circular Polarization)
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



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)

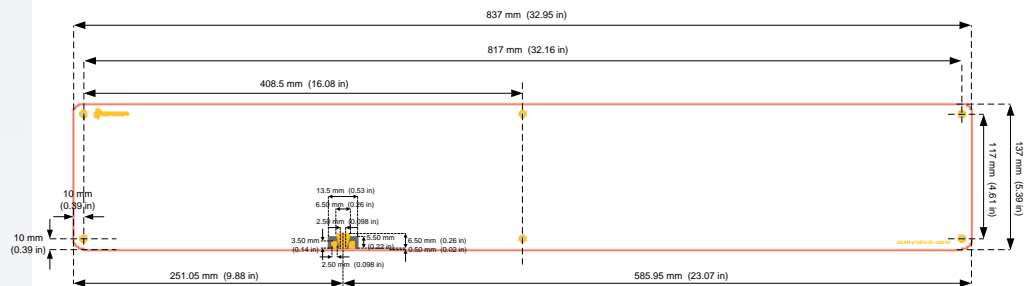
6 Holes $\varnothing = 3.3$ mm (0.13 in)

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	
								FF = frequency band
	EU							865,6 MHz - 867,6 MHz
	US							902,0 MHz - 928,0 Mhz
								Connector shape
			EL					Edge mount, at the long side of the antenna
			FL					Flange straight
			FR					Flange right angle
								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-p16EU-ELSMA-200:**
 - Advantenna-p16
 - Frequency band : 865,6 MHz - 867,6 MHz
 - **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 - 928,0 Mhz
 - **Flange right angle** connector
 - Default connector orientation
 - **SMA** connector
 - Model **200**
- **ADAN-p16EU-FR270SMA-200:**
 - Advantenna-p16
 - Frequency band : 865,6 MHz - 867,6 MHz
 - **Flange right angle** connector
 - Connector rotated 270° counterclockwise
 - **SMA** connector
 - Model **200**