



Benefits:

- Slightly narrow beam in the endfire direction
- Wide beam in the broadside direction
- Very thin form factor
- Cost effective

Applications:

- Electronic Article Surveillance pedestals, that combine acousto-magnetic and RFID technologies
- Point of Sales systems

Product overview

Advantenna-p12 is a compact RFID UHF antenna with circular polarization and a radiation pattern characterized by a 90° beam width in the broadside direction and a 60° beam width in the endfire direction.

Advantenna-p12 has a very thin form factor. This allows to integrate the antenna inside thin objects .

Advantenna-p12 is ideal for loss-prevention systems at retail stores. Advantenna-p12 can be embedded inside pedestals of electronic article surveillance (EAS) based on acousto-magnetic technology, transforming such pedestals into hybrid systems that include two technologies simultaneously: acousto-magnetic and RFID.

Connector options



Flange straight



Flange right angle

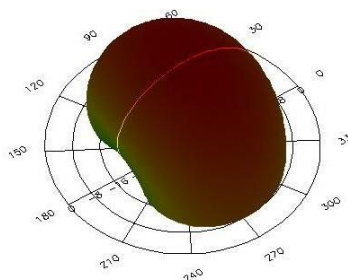


Edge mount

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 3.5 m
Gain	5.3 dBi (EU version), 5.3 dBi (US version)
Beam width	60° / 90°
Polarization	Circular
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	277 mm x 137 mm x 3.3 mm 10.8 inches x 5.4 inches x 0.13 inches
Size with edge mount connector	277 mm x 137 mm x 8 mm 10.8 inches x 5.4 inches x 0.3 inches
Size with flange connector	277 mm x 137 mm x 15 mm 10.8 inches x 5.4 inches x 0.6 inches
Antenna weight	230 g

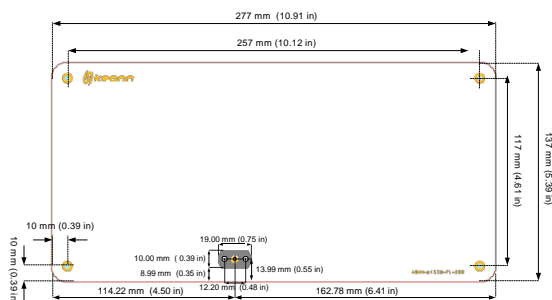
Radiation pattern





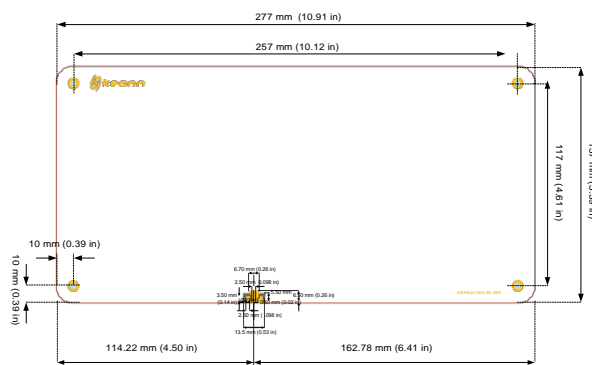
Mechanical specifications

With flange straight or flange right angle connector



Antenna Board Thickness = 3.3 mm (0.13 in) View from the side that radiates
Holes \varnothing 3 mm (0.13 in)

With edge mount connector



Antenna Board Thickness = 3.3 mm (0.13 in) View from the side that radiates
Holes \varnothing 3 mm (0.13 in)

Advantenna-p12™



Product codes for ordering

ADAN-p12	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-p12EU-ELSMA-200:**
 - Advantenna-**p12**
 - Frequency band : 865,6 MHz - 867,6MHz
 - **Edge mount** connector, placed at the long side of the antenna
 - **SMA** connector
 - Model **200**
- **ADAN-p12US-FRSMA-200:**
 - Advantenna-**p12**
 - Frequency band : 902,0 MHz - 928,0Mhz
 - **Flange right angle** connector
 - Default connector orientation
 - **SMA** connector
 - Model **200**
- **ADAN-p12EU-FR270SMA-200:**
 - Advantenna-**p12**
 - Frequency band : 865,6 MHz - 867,6MHz
 - **Flange right angle** connector
 - Connector rotated 270° counterclockwise
 - **SMA** connector
 - Model **200**