



keonn

Modular RFID
Components

Advantenna-SP12™

High gain antenna





Benefits:

- High gain
- Very thin form factor (compared to other high gain antennas available in the market)
- Very light weight
- Cost effective

Applications:

- RFID portals
- RFID tunnels
- Tracking systems

Product overview

Advantenna-SP12 is an ultra-light RFID UHF Antenna with a very high gain, circular polarization and a radiation pattern characterized by a 70° beam width in one plane and a 40° beam in the other plane.

The combination of a high gain, thin form factor and ultra-light design make this antenna ideal for many RFID applications such as RFID portals, RFID tunnels, tracking systems, etc.

Technical specifications

Operating Frequency ETSI Version	865 - 868 MHz (ETSI EN 302 208)
Operating Frequency FCC Version	902,0 MHz - 928,0 Mhz
Operating Detection distance	Up to 10 metres
Gain	9.5 dBi (6.6 dBiL) EU version
Beam width	40° / 70°
Polarization	Circular
Input Impedance	50 Ω
Connector	PCB mount right angle SMA Beneath the bottom layer of the antenna, or between the layers of the antenna

Physical specifications

Without enclosure

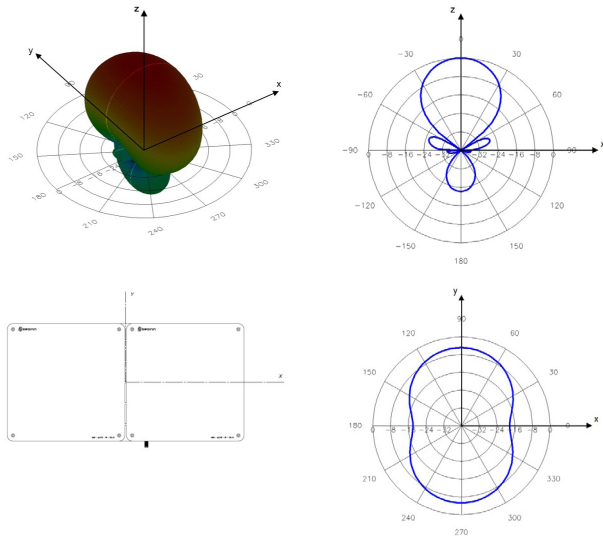
Size excluding connector	417 mm x 207 mm x 11.6 mm 16 inches x 8.15 inches x 0.45 inches
Antenna weight	385 g

Physical specifications

With enclosure

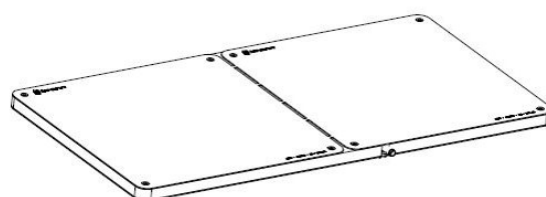
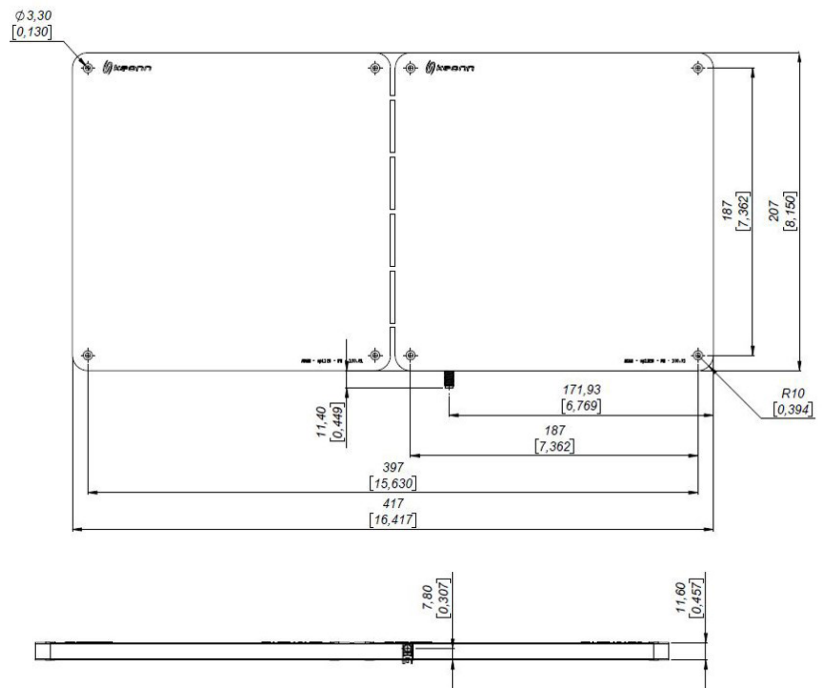
Size excluding connector	480 mm x 240 mm x 60 mm 18.89 inches x 9.45 inches x 2.36 inches
Antenna weight	2520 g

Radiation pattern



Mechanical specifications:

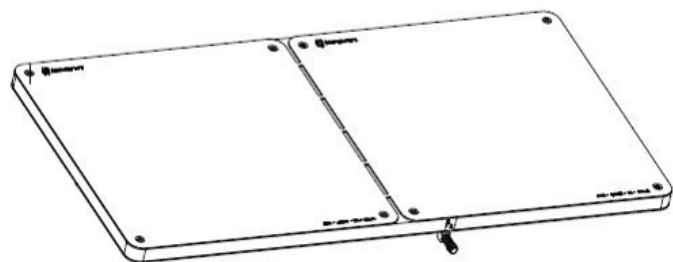
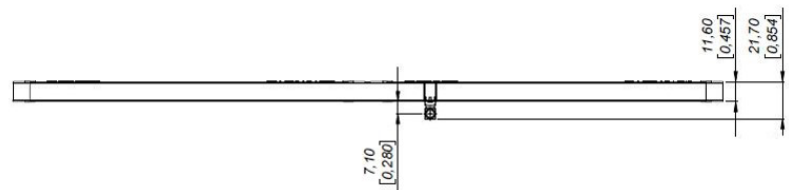
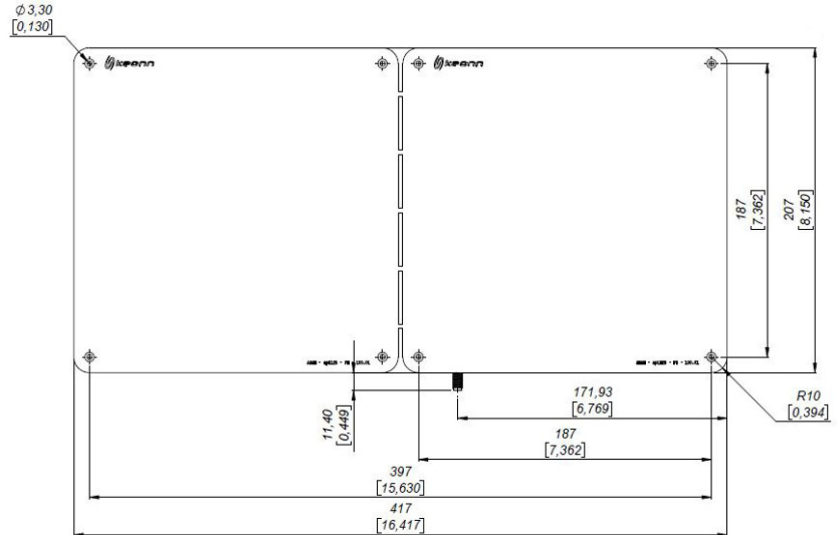
Connector between the layers of the antenna



Units in millimeters
[Units in inches]

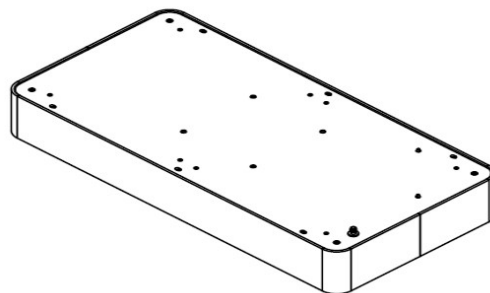
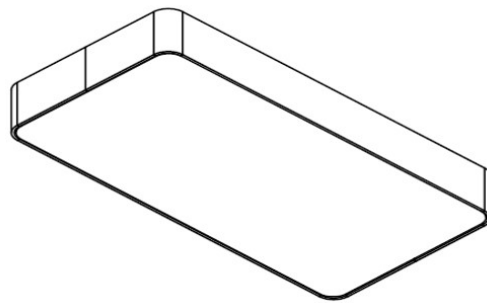
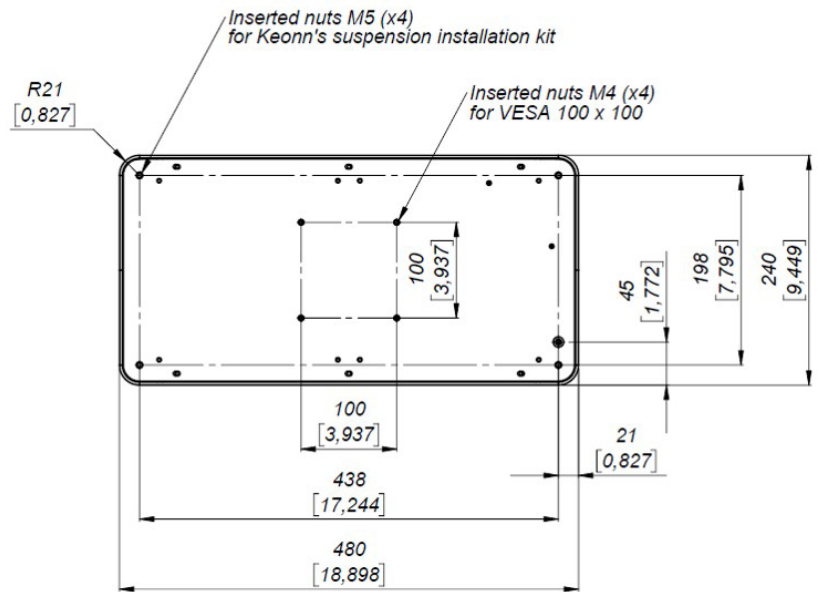
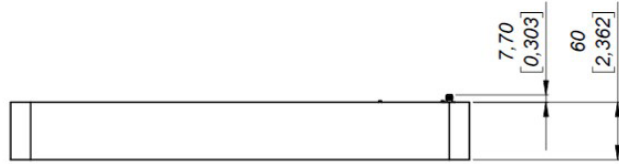
Mechanical specifications:

right angle connector over the non-radiating side of the antenna



Units in millimeters
[Units in inches]

Mechanical specifications: antenna with enclosure



Units in millimeters
[Units in inches]

Product codes for ordering

ADAN-SP12	FF	-	e	-	CP	CT	-	N	-	mmm	
											FF = frequency band
	EU										865,6 MHz - 867,6 MHz
	US										902,0 MHz - 928,0 MHz
											Enclosure
			-								No enclosure
			e								With enclosure
											Connector position
					PRM						Edge mount connector between the layers of the antenna
					PRO						Right angle connector over the non-radiating side of the antenna
					FL						Version with enclosure: flange straight connector
											Connector type
						SMA					SMA connector
											Number of antennas in one board
								1			Number of antennas
								-			Version with enclosure
											Model
										100	Model number

Examples:

ADAN-SP12EU-PRMSMA-1-100:

- Advantenna-**SP12**
- ETSI frequency band, 865,6 MHz - 867,6 MHz
- **Edge mount connector** (inside the layers of the antenna)
- **One** single antenna
- Model **100**

ADAN-SP12US-e-FLSMA-100

- Advantenna-**SP12**
- FCC frequency band, 902,0 MHz - 928,0 MHz
- With enclosure
- Flange straight SMA connector
- Model **100**



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