

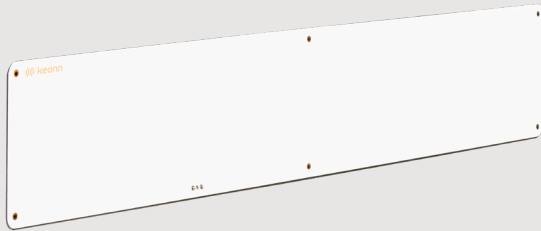


keonn

Modular RFID
Components

Advantenna-p16 TM

RFID UHF fan beam antenna





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

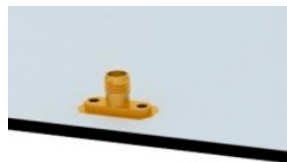
Product overview

Advantenna-p16 is a compact RFID UHF 6 elements patch 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:

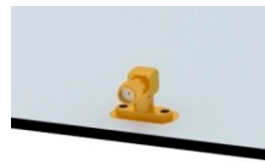
- Time keeping of sport events, marathons, race timing
- Overhead loss prevention systems
- Portals
- Corridors
- Doors
- Toll systems
- Vehicle tracking

Holder available specially designed for this model of antenna: [AdvanHolder-p16](#)

Connector options



Flange straight

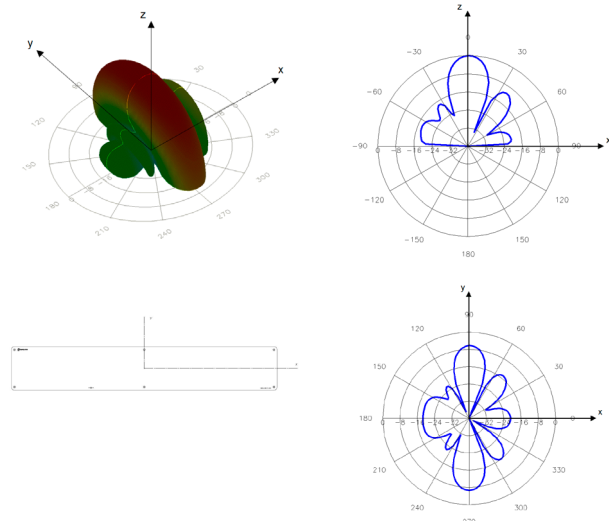


Flange right angle



Edge mount

Antenna radiation pattern



*Front-to-back ratio not drawn

Technical specifications



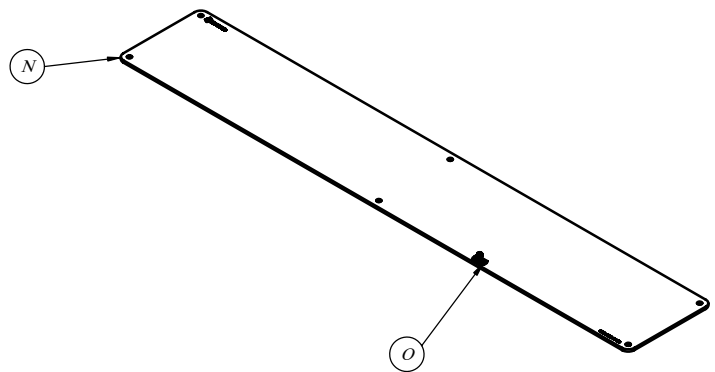
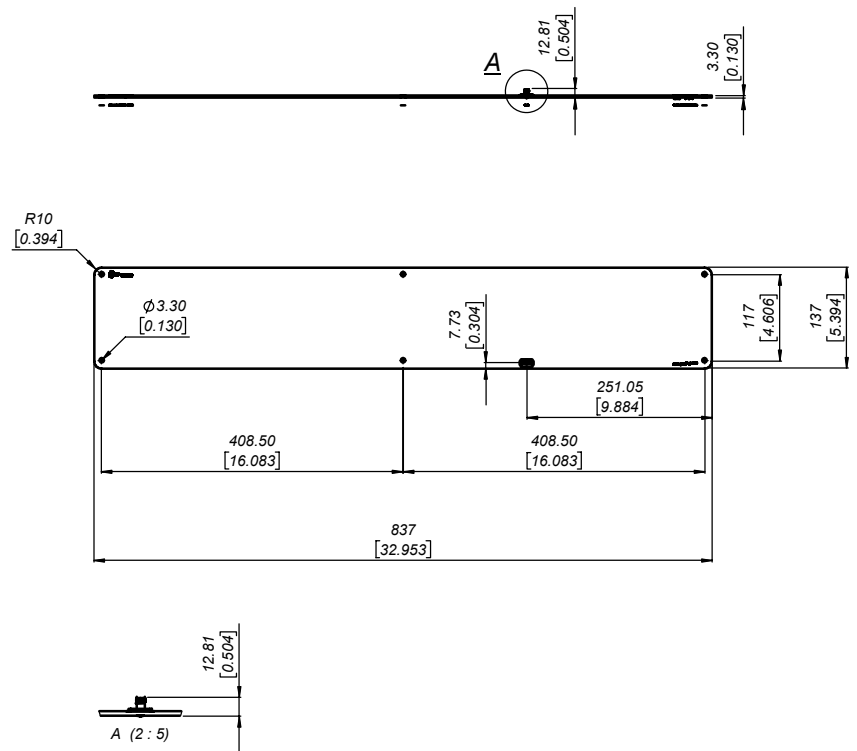
| | |
|---|--|
| Operating Frequency EU Version | 865 - 868 MHz (ETSI EN 302 208) |
| Operating Frequency US Version | 902 - 928 MHz (FCC part 15) |
| Antenna Technology | Patch |
| Radiation pattern | Fan beam |
| Gain | EU version 9.4 dBiC (Typical), 9.5 dBiC (Max) 6.8 dBiL* US version 9.2 dBiC (Typical), 9.4 dBiC (Max) 6.8 dBiL* |
| VSWR | < 1.4:1 |
| Beam width (AZ / EL) | 20° / 90° |
| Sidelobe level | < -15 dB |
| Front-to-Back Ratio | < -20 dB |
| Polarization | Circular - LHCP (Left Hand Circular Polarization) |
| Axial Ratio | EU version* At Boresight 0.6 dB At 3dB Beamwidth 0.5 dB (Typical), 2.5 dB (Max) US version* At Boresight 0.6 dB At 3dB Beamwidth 1.0 dB (Typical), 2.8 dB (Max) |
| Input Impedance | 50 Ω |
| Connector | SMA or MCX Flange, flange right angle, or edge mount (on the long side of the antenna) |
| Regulation | ROHS - EU Directive 2015/863 WEEE - EU Directive 2012/19/EU REACH - EC No 1907/2006 ETSI EN 302 208 |
| IP rating | Indoor antenna IP68** |
| 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 edge mount connector | 837 mm x 137 mm x 9 mm 32.9 inches x 5.4 inches x 0.4 inches |
| Size with flange straight angle connector | 837 mm x 137 mm x 13 mm 32.9 inches x 5.4 inches x 0.5 inches |
| Size with flange right angle connector | 837 mm x 137 mm x 16.31 mm 32.9 inches x 5.4 inches x 0.6 inches |
| Antenna weight | 725 g |

*Measured at the center of the band

** IP rating in this case indicates the conditions that the antenna can withstand at specific times and, afterwards, continue working normally, they are not conditions under which it can work permanently.

Mechanical specifications

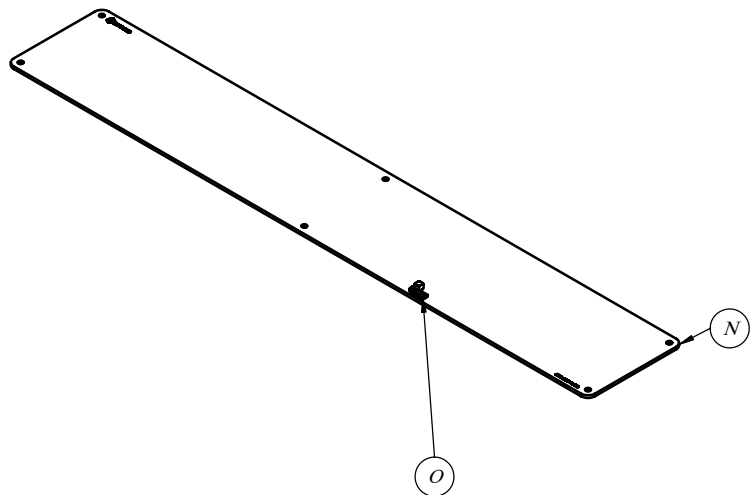
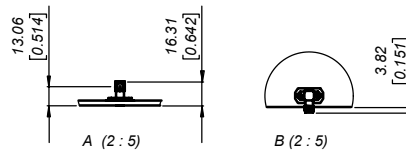
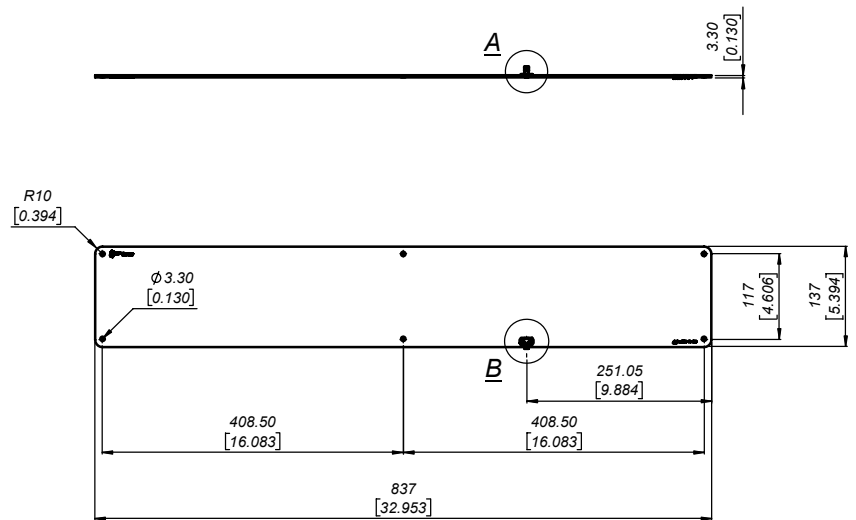
With flange straight angle connector



Units in millimeters and [inches]

Mechanical specifications

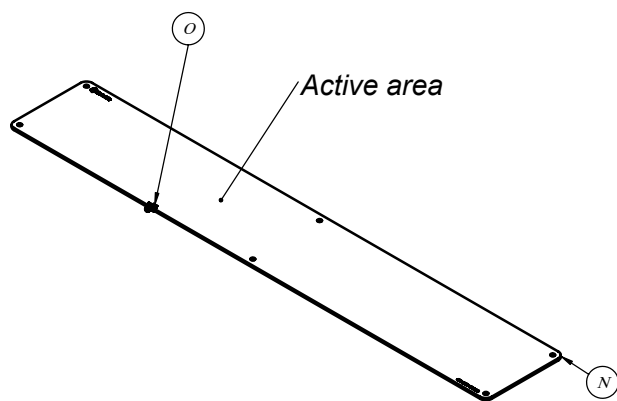
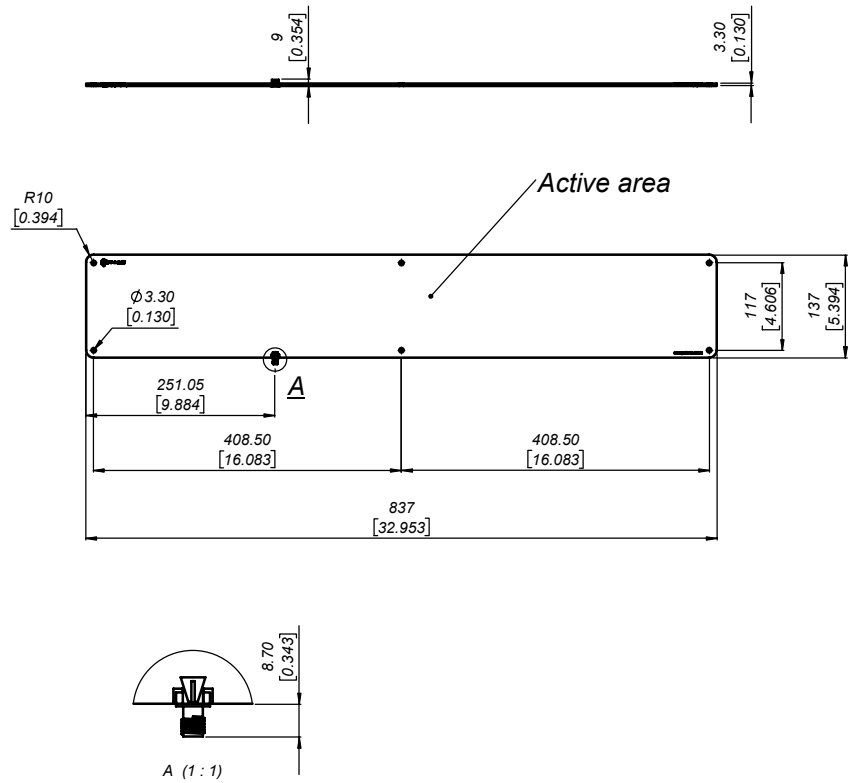
With flange right angle connector



Units in millimeters and [inches]

Mechanical specifications

With edge mount connector



Units in millimeters and [inches]

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**

Disposal of the product

Do not dispose the product in municipal or household waste. Please check your local regulations for disposal/recycle of electronic products.





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supersedes all earlier versions.
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