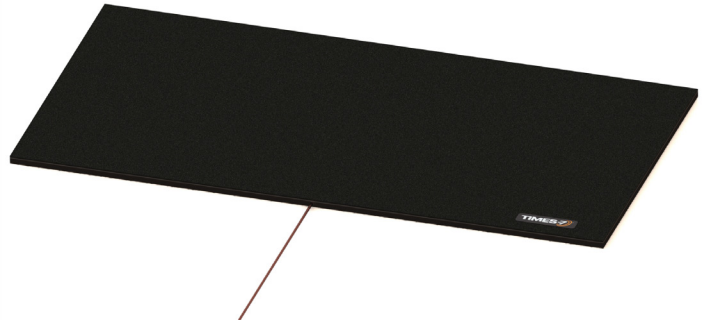


UHF ANTENNA PORTAL A5060



PRODUCT DESCRIPTION

Offering a read range of up to 10 m / 33 ft. and physical dimensions of 600 mm x 300 mm, iDTRONIC's high-gain antenna is particularly suitable for industrial portal applications where maximum read zone coverage is essential.

The multi-element antenna array provides reliable readability in high-dense tag environments and less distortion in a highly reflective environment. Moreover, its standard dimensions allow fitting behind ceiling tiles and in cabinets and shelves or covering large bench tops.

The IP54 rating and the 10.5 dBiC gain specification make this antenna highly suitable for industrial applications.

A standalone portal can be realized with four A5060 antennas, with one antenna overhead and the other three on the sides, mounted offset to one another. All possible tag orientations will be captured due to the A5060's circular polarization and A5060 antenna's locations. The antennas on the sides are offset such that the antennas do not face each other and induce maximum coverage within the portal. Almost all assets can be tracked with greater accuracy using iDTRONIC's A5060 antenna.

The six integrated mounting holes allow for flush mounting, while the option to VESA mount using the optional Mounting Plate adds further flexibility to your setup.

► APPLICATIONS

- Industrial Portal Applications
- Vehicle Tolling / Access Control
- Tool Tracking
- Warehouse Shelving Systems

► FEATURES

- Reading Range: up to 10 m
- Sleek Design with Flat Radome
- High Gain: 10.5 dBiC
- Convenient Mounting
- IP54

► RFID OPTIONS

- 864 – 868 MHz (ETSI)
- 902 – 928 MHz (FCC)

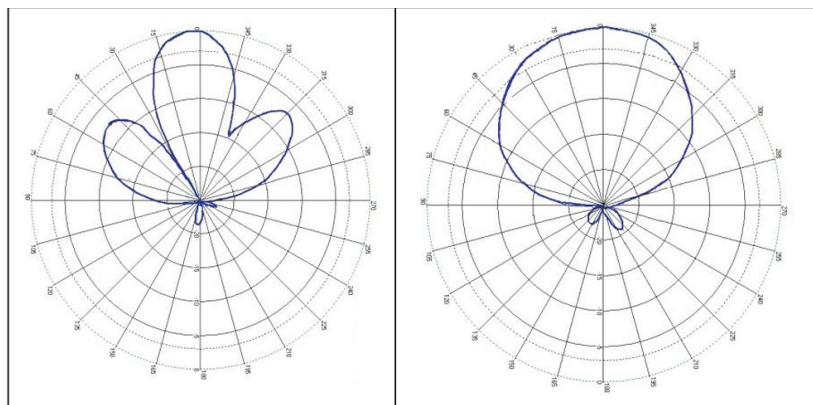
TECHNICAL DATA

| ELECTRICAL SPECIFICATIONS | |
|---------------------------|---|
| Frequency Range | 864 – 869 MHz (EU) 902 – 928 MHz (US) |
| Polarization | RHCP (Right Hand Circular Polarized) |
| Operating Distance | up to 10 m* |
| Connector Type | SMA female side connector |
| Antenna Gain | 10.5 dBiC typical |
| Beam width | 25° in XZ-plane, 60° in YZ-plane |
| VSWR | 1.4 typical |
| Front to back | -25 dB |
| Axial Ratio | 2 dB typical |
| Nominal Impedance | 50 Ω |
| Anti-static protection | DC Grounded |
| Antenna Detection | 10K Ω resistance |
| Maximum Input Power | 3 W |

| MECHANICAL ENVIRONMENTAL SPECIFICATIONS | |
|---|---------------------|
| Dimensions | 600 × 300 × 8.6 mm |
| Weight | 1.5 kg |
| Housing-Material | Fire-Retardant ABS |
| Environmental Rating | IP54 |
| Operating & Storage Temperature | -20 ° to +55 °C |
| Mounting | Flush or VESA mount |
| Humidity | 5% to 95% |

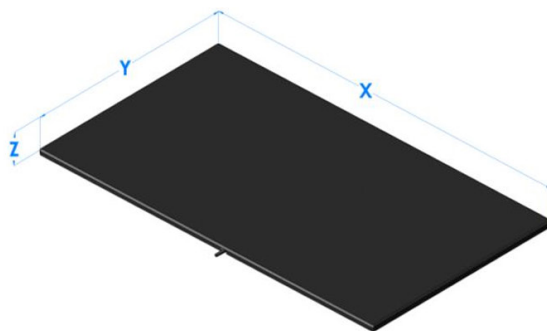
| SUPPORTED TRANSPONDERS |
|--|
| Standard ISO 18000-6C (EPC Class 1 Generation 2) E.g.: Alien Higgs 2/3/4, Impinj Monza, NXP UCODE, etc. |

RADIATION PATTERN & ANTENNA PLANES



PORTAL A5060 XZ Plane

PORTAL A5060 YZ Plane



ORDER CODE

| VERSION | ORDER CODE |
|---|--------------------|
| PORTAL A5060 UHF Antenna - ETSI | R-IN-UHF-A5060 |
| PORTAL A5060 UHF Antenna - FCC | R-IN-UHF-A5060-FCC |
| ACCESSORIES | ORDER CODE |
| Mounting Plate for PORTAL A5060 UHF Antenna | R-IN-UHF-A5060-MP |

APPLICATION EXAMPLES

VEHICLE TOLLING / ACCESS CONTROL

The PORTAL A5060's 10.5dBiC gain is powerful enough to read vehicular tags, e.g., embedded in the wind-screen or the number plate, from greater distances. The 25° narrow beam can be used to create confined RF zones for each lane.



TOOL TRACKING

The PORTAL A5060 antenna is an excellent option for tracking tools within your tool cabinetry. In environments with highly reflective metallic surfaces, traditional RFID antennas often encounter challenges. However, the A5060 stands out due to its multielement design, resulting in reduced sensitivity to metallic objects. To ensure efficient reading, it's recommended to use specially designed 'on-metal' RFID tags and position the items within the line of sight of the antenna.



WAREHOUSE SHELVING APPLICATION

The PORTAL A5060's footprint fits both metric and imperial shelves. The slim antenna offers a snug fit inside the shelf without engulfing a lot of useful space. The multi-element antenna design keeps the antenna's beam active in every nook and corner. Assets on the shelves can be monitored in real-time with great accuracy.

