

### ABOUT TIMES-7

Pushing the boundaries of RFID technology worldwide Times-7 are leaders in RFID antenna design and manufacture. Our patented award winning UHF antennas meet the needs of virtually any industry application; providing customers with fast accurate tracking of products, assets & people; empowering organizations to transform processes & reduce costs.

Our SlimLine range of antennas is unique in the RFID industry; offering high levels of performance & durability in an aesthetically superior form. Proven in a diverse & growing range of markets, applications include retail & customer interaction, conference & people tracking, race timing, baggage handling, and logistic & supply chain asset management.

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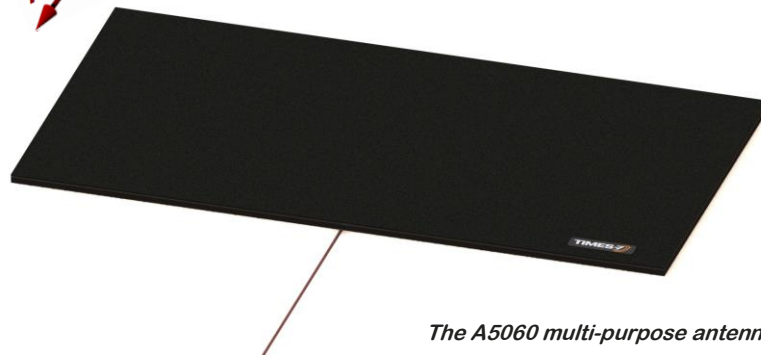
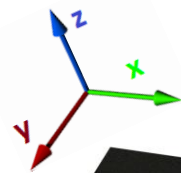
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High Gain, up to 10m / 33 ft. read range

Standard dimensions  
(600 mm x 300 mm)  
(2' x 1')

Multi-element array

IP65 rated for outdoor applications



*The A5060 multi-purpose antenna*

An exciting new addition to the SlimLine range of multi-purpose antennas, the A5060 is a circular polarized high gain antenna with an ultra-low profile, offering a read range of up to 10 m / 33 ft.

The A5060 is designed with a multi-element array to avoid distortion for maximum readability in a highly reflective and densely populated tag environment. The A5060 is especially suitable for industrial portal applications.

Its standard physical size (600 mm x 300 mm / 2' x 1') allows the A5060 to be readily mounted behind ceiling tiles, in cabinets or to cover large bench tops.

The antenna is IP65 rated and suitable for outdoor applications.

The A5060 can be flush mounted using the three integrated mounting holes.

### Specifications

#### **Physical / Environmental Specifications**

Dimensions (L x W x D):	600 mm x 300 mm x 8 mm (2' x 1' x 0.3")
Weight:	1.5 kg
Radome Material:	Fire retardant ABS
Environmental Rating:	IP65
Operating / Storage Temperature:	-20° to +55°C / -30° to +65°C -4° to +131°F / -22° to +149°F
Mounting:	Integrated mounting holes / Universal mounting brackets for rack (VESA) mounting available
Connector type / position:	SMA female side fly lead
Cable:	RG316 – 250 mm / 9.8 "

#### **Electrical Specifications**

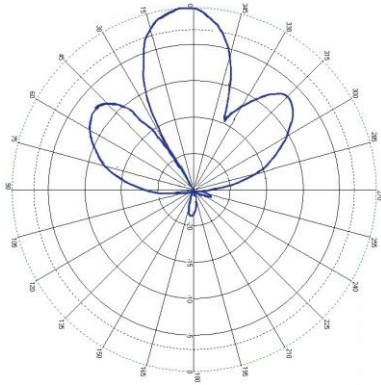
Frequency Range:	864-868 MHz (ETSI) / 902-928 MHz (FCC)
Polarisation:	RHCP (Right Hand Circular Polarized)
Far-field Gain:	10.5 dBiC typical
Far-field 3dB beamwidth:	25° in XZ-plane, 60° in YZ-plane
VSWR:	1.4 typical
Front to back ratio:	-25 dB
Axial Ratio:	2 dB typical
Nominal Impedance:	50 Ω
Anti-static protection:	Yes, DC grounded
Antenna Detection	10 K Ω resistance
Maximum Input Power:	3 W

### Ordering Information

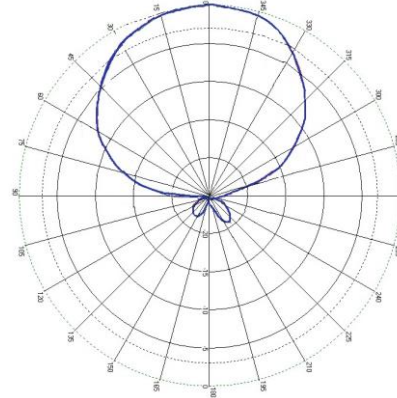
*(please quote both product code & part no.)*

Product Code	Band	Part No.
A5060	ETSI 864-868 MHz	71876
A5060	FCC 902-928 MHz	71875
Cable Accessories	Cable Type	Part No.
Cable 2 m, SMA to RPTNC	LMR 195 / 240 / 400	71436 / 71782 / 72042
Cable 4 m, SMA to RPTNC	LMR 240 / 400	71784 / 72043
Cable 6 m, SMA to RPTNC	LMR 240 / 400	71904 / 72044
Cable 8 m, SMA to RPTNC	LMR 240 / 400	71788 / 72045

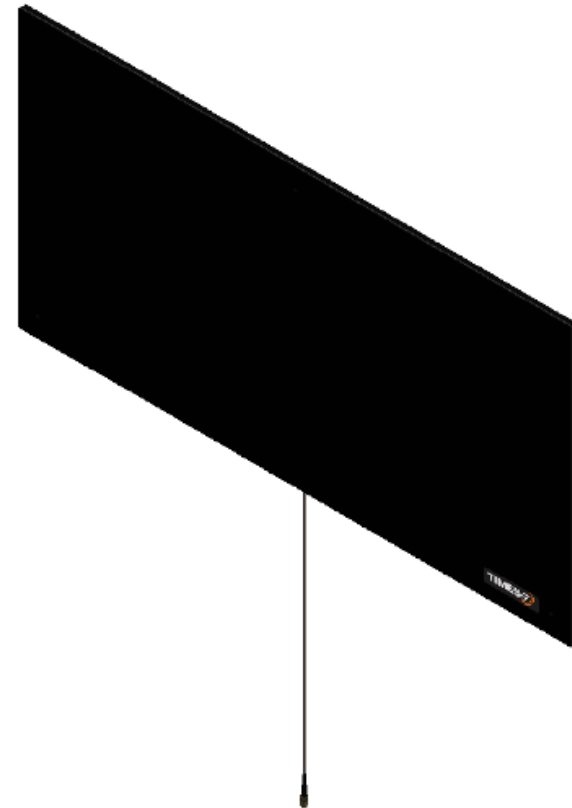
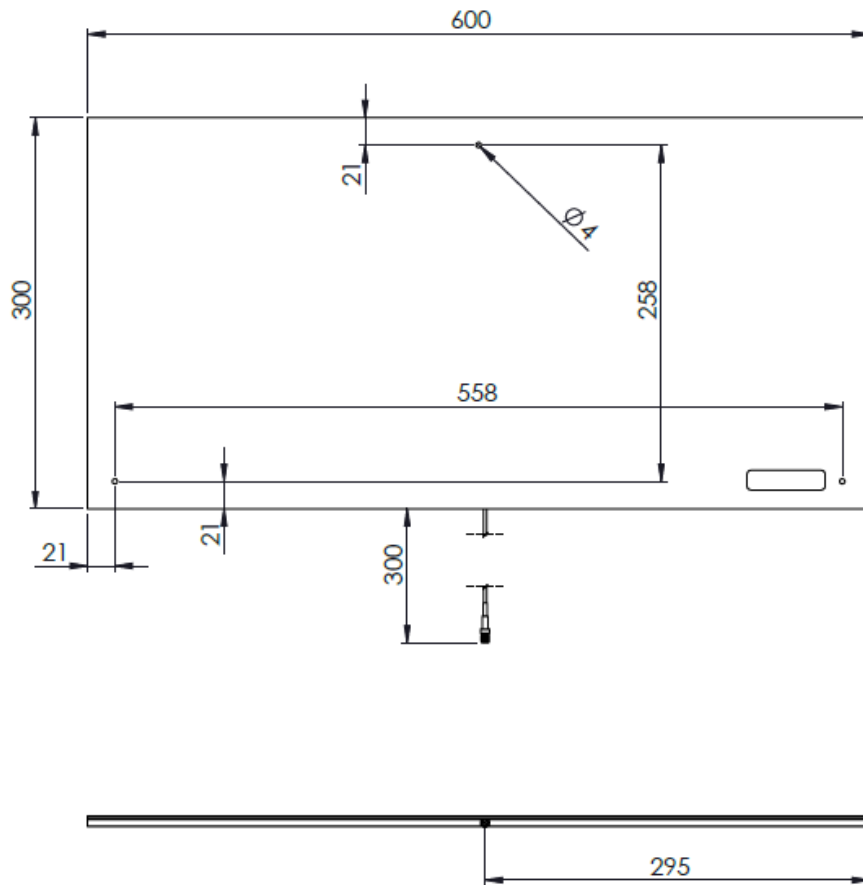
*E-Field Radiation Pattern*



XZ-plane



YZ-plane



UNLESS OTHERWISE SPECIFIED:

DIMENSIONS ARE IN mm  
TOLERANCES:  
FRACTIONAL:  $\pm$   
ANGULAR: MACH:  $\pm$  BEND:  $\pm$   
TWO PLACE DECIMAL:  $\pm$   
THREE PLACE DECIMAL:  $\pm$

INTERPRET GEOMETRIC  
TOLERANCING PER:

MATERIAL

FINISH

DO NOT SCALE DRAWING

A5060

SIZE DWG. NO.  
**A3**

REV  
**B**

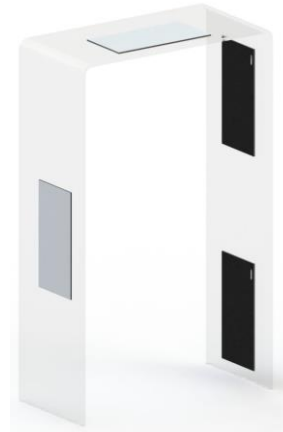
SCALE: 1:4 Robby Lopez WEIGHT:

SHEET 1 OF 1

## Applications

### Industrial Portal

The IP65 rating and the 10.5 dBiC gain specification makes this antenna highly suitable for industrial applications. A densely packed asset with numerous tags can be identified accurately with almost no effort. A standalone portal can be realized with four A5060 antennas (see pictures) 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 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 our A5060 antenna.



The vertical configuration is recommended for high density asset tracking (such as palletized boxes, trolley of laundry goods, etc) where you will need a greater RF zone to efficiently read all the tagged items. The RF beam is intentionally spilled in and out of the portal.



The horizontal configuration is recommended to avoid the stray reads due to the RF spill. The read zone/area is restricted within the width of the portal. Assets that are not densely packed can be read efficiently using this configuration.

### Ceiling Tiles Antenna Configuration

The A5060 antenna can be deployed behind standard ceiling tiles to actively monitor assets in a workspace without necessarily altering the existing setup. Unlike other antennas, the installation will be straight forward and hassle free. The A5060 antenna is designed to accommodate standard ceiling tiles. The antenna is fire retardant hence complying the building safety requirements.





### Vehicle Tolling/Vehicle Access Control

The A5060 antenna's 10.5 dBiC gain is powerful enough to read vehicular tags, e.g. embedded in the windscreen or the number plate, from greater distances. The 25° narrow beam can be used to create confined zones for each lane. The antenna is IP65 rated and is suitable for permanent outdoor applications.



### Tool Tracking

The A5060 antenna is a good choice to track tools in a tool cabinet. Highly reflective metallic environments are a challenge for traditional RFID antennas. A5060 is a multi-element antenna by design hence it is less affected by metallic assets and just need to be in the line of sight of the antenna to be read efficiently. The tools will have to be typically tagged using 'on-metal' tags.



### Warehouse Shelving Application

The A5060 antenna is robust in its construction for industrial application. The antenna'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. Due to the limited surface dead zones, assets in the shelves can be monitored in real-time with great accuracy.



### Laundry Applications

With its high gain, the A5060 antenna has the potential to read through densely packed laundry items. The antennas can either be configured as a standalone industrial portal to track trolleys full of laundry goods or can be used in a conveyor to track movement. The antenna's confined RF emission eliminated stray tag reads. The antennas can also be used over the bench tops in packing/folding stations. Spray cleaning for hygiene reasons is no problem as the antenna is IP65 rated.



### **OUR GLOBAL NETWORK**

Constantly increasing market reach and influence in the global RFID industry, Times-7's international support spans The Americas, Europe, and Asia Pacific regions through our distributor, authorized reseller, and integrated solutions provider network.

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