

## 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.



*SlimLine Doorway Portal Application*

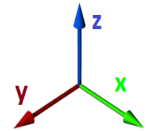


*A8065 antenna*

360° reading coverage,  
regardless of tag orientation

High performance & cost effectiveness

Snug fit for more space in high foot traffic  
areas



The SlimLine A8065 Combo is a high performing and aesthetically pleasing Doorway Portal Application with absolutely no compromise on spatial dimensions offering a unique 360° reading coverage.

To achieve the best and densest reading range, the Times-7 SlimLine A8065 Combo is the first Doorway Portal Application in the UHF RFID market to combine three different polarizations: Vertical linear and Horizontal linear mounted on the sides and Dual linear mounted on top of a door frame. That way the A8065 Combo guarantees a reliable 360° reading coverage regardless of the tag orientation.

The ultra-low profile (8 mm / 0.3") and slim dimensions of each antenna (86 mm / 3.4" wide) gives it a snug fit into door frames. It allows more space, which is particularly important for high foot traffic areas.

Each A8065 (D, V, H) is also individually available. Please, refer to the Part no. on this datasheet.

## Specifications

### Physical / Environmental Specifications

|                                  | A8065 Dual Linear   | A8065 Horizontal  | A8065 Vertical  |
|----------------------------------|---|---|---|
| Dimensions (L x W x D):          | 700 mm x 86 mm x 8 mm<br>27.5 " x 3.4 " x 0.3 "                 | 700 mm x 86 mm x 8 mm<br>27.5 " x 3.4 " x 0.3 "                 | 700 mm x 86 mm x 8 mm<br>27.5 " x 3.4 " x 0.3 "                 |
| Weight:                          | 0.5 kg / 1.1 lbs.   | 0.5 kg / 1.1 lbs.   | 0.5 kg / 1.1 lbs.   |
| Radome Material:                 | Fire retardant ABS  | Fire retardant ABS  | Fire retardant ABS  |
| Environmental Rating:            | IP54  | IP54  | IP54  |
| Operating / Storage Temperature: | -20° to +55°C / -30° to +65°C<br>-4° to +131°F / -22° to +149°F | -20° to +55°C / -30° to +65°C<br>-4° to +131°F / -22° to +149°F | -20° to +55°C / -30° to +65°C<br>-4° to +131°F / -22° to +149°F |
| Mounting:                        | Integrated mounting guides / Adhesive foam strip                | Integrated mounting guides / Adhesive foam strip                | Integrated mounting guides / Adhesive foam strip                |
| Connector type / position:       | SMA female side fly lead (300 mm / 1 ')                         | SMA female side fly lead (300 mm / 1 ')                         | SMA female side fly lead (300 mm / 1 ')                         |
| Cable:                           | 2 x RG-316 Cable  | 1 x RG-316 Cable  | 1 x RG-316 Cable  |

### Electrical Specifications

|                                      | A8060 Dual Linear  | A8060 Horizontal                       | A8060 Vertical                         |
|--------------------------------------|--|--|--|
| Frequency Range:                     | 865-868 MHz (ETSI) / 902-928 MHz (FCC)   | 865-868 MHz (ETSI) / 902-928 MHz (FCC) | 865-868 MHz (ETSI) / 902-928 MHz (FCC) |
| Polarization:                        | Vertical & Horizontal Linear   | Horizontal Linear                      | Vertical Linear                        |
| Far-field Gain:                      | Horizontal: 3dBi; Vertical: 4dBi   | 6 dBi                                  | 7.5 dBi                                |
| Far-field 3dB beamwidth:             | Vertical Pol: 25° in XZ plane; Horizontal Pol: 40° in XZ<br>Vertical Pol: 140° in YZ plane; Horizontal Pol: 110° in YZ | 30° in XZ-plan, 110° in YZ-plane       | 25° in XZ-plan, 120° in YZ-plane       |
| Typical VSWR across frequency range: | 1.4 at centre of band (915 MHz) and<br>2.5 at edges (902 & 928 MHz)  | 1.8:1                                  | 1.8:1                                  |
| Front to back ratio:                 | Vertical Pol: -5dB; Horizontal Pol: -10dB  | -6 dB                                  | -12 dB                                 |
| Nominal Impedance:                   | 50 Ω   | 50 Ω                                   | 50 Ω                                   |
| Anti-static protection:              | Yes  | Yes                                    | Yes                                    |
| Antenna Detection                    | 10 k Ohm   | 10 k Ohm                               | 10 k Ohm                               |
| Maximum Input Power:                 | 6 W  | 6 W                                    | 6 W                                    |

## Ordering Information

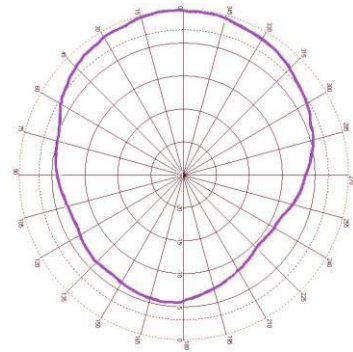
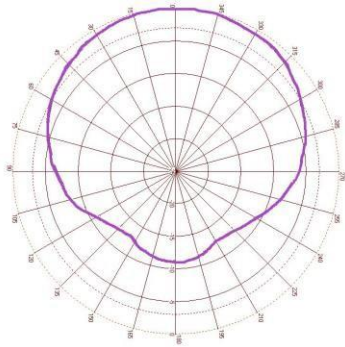
*(please quote both product code & part no.)*

| Product Code | Band             | Part No. |
|--------------|------------------|----------|
| A8065 Combo  | ETSI 864-868 MHz | 71881    |
| A8065 Combo  | FCC 902-928 MHz  | 71880    |

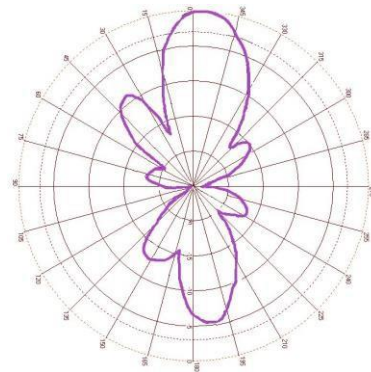
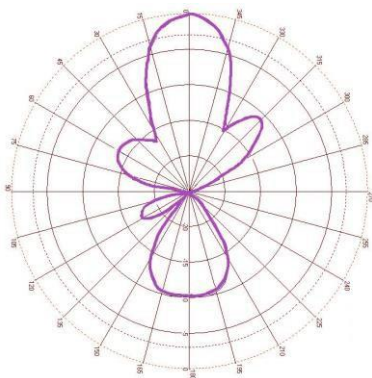
| Product Code            | Band             | Part No.      |
|-------------------------|------------------|---------------|
| A8065V                  | ETSI 864-868 MHz | 71885         |
|                         | FCC 902-928 MHz  | 71884         |
| A8065H                  | ETSI 864-868 MHz | 71887         |
|                         | FCC 902-928 MHz  | 71886         |
| A8065D                  | ETSI 864-868 MHz | 71883         |
|                         | FCC 902-928 MHz  | 71882         |
| Cable Accessories       | Cable Type       | Part No.      |
| Cable 2 m, SMA to RPTNC | LMR 195 / 240    | 71436 / 71782 |
| Cable 4 m, SMA to RPTNC | LMR 195 / 240    | 71437 / 71784 |
| Cable 8 m, SMA to RPTNC | LMR 195 / 240    | 71438 / 71788 |

*Electric Field Radiation Patterns*

**A8060 Dual Linear**

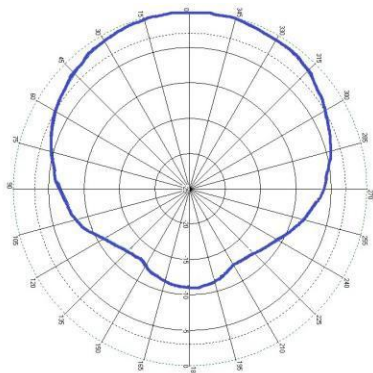


XZ-plane – Vertical Pol and Horizontal Pol

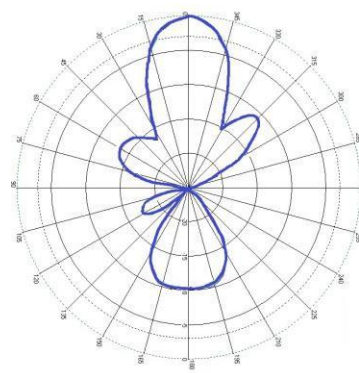


YZ-plane – Vertical Pol and Horizontal Pol

**A8060V**

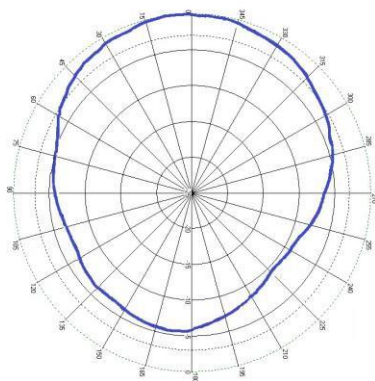


XZ-plane

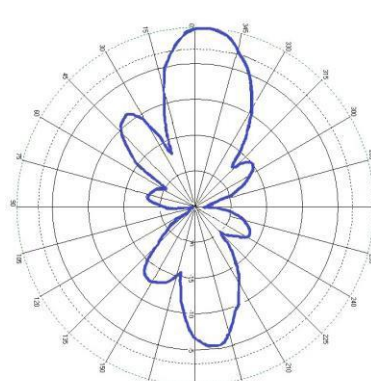


YZ-plane

**A8060H**



XZ-plane



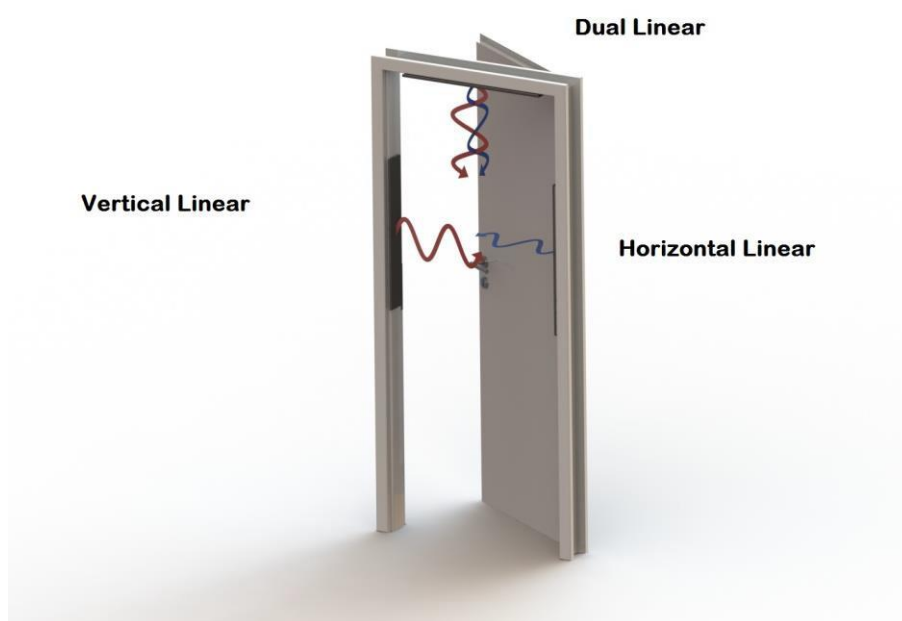
YZ-plane

## Mounting information

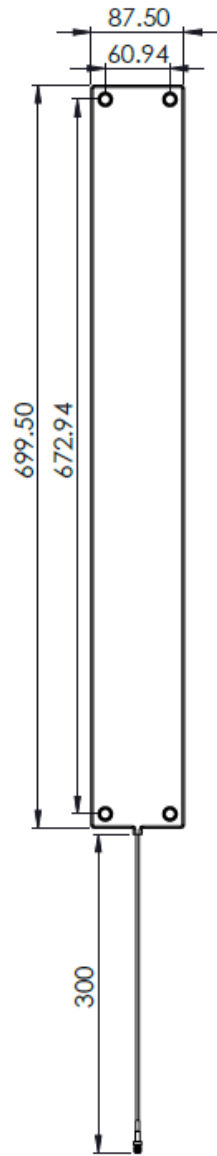
To mount the A8065 Combo, we recommend using the integrated mounting guides, which can be drilled through without damaging the antenna.

You can also use the adhesive foam strip attached to the back of the antenna. It can be utilized on most clean and even surfaces. Please note, that the adhesion of the foam strip is very strong and made for permanent use.

## Polarization of the A8065 Combo



The combination of three polarizations - Vertical Linear and Horizontal Linear mounted on the sides, Dual Linear on top of the doorframe - guarantees a 360° reading coverage regardless of the tag orientation.



Rear view  
4x 6.55mm mounting holes



UNLESS OTHERWISE SPECIFIED:

DIMENSIONS ARE IN mm  
TOLERANCES:  
FRACTIONAL ±  
ANGULAR: MACH ± BEND ±  
TWO PLACE DECIMAL ±  
THREE PLACE DECIMAL ±

INTERPRET GEOMETRIC  
TOLERANCING PER:

MATERIAL

FINISH

DO NOT SCALE DRAWING

## A8065 - Horizontal and Vertical Versions

|            |             |              |
|------------|-------------|--------------|
| SIZE       | DWG. NO.    | REV          |
| <b>A3</b>  |             | <b>B</b>     |
| SCALE: 1:1 | Robby Lopez | WEIGHT:      |
|            |             | SHEET 1 OF 2 |

## Applications

### One-Stop Doorway Solution:

The A8065 combo antenna consists of three different antennas viz., the A8065V, A8065H and A8065D. Two antennas that go on either side of the doorway are A8065V and A8065H, vertical linearly polarized and horizontal linearly polarized. In addition to the side antennas, the combo bears a single overhead antenna (A8065D) which is dual linearly polarized. The A8065D has two ports and emit RF signals that are both horizontal linearly and vertical linearly polarized.

The A8065 combo can read tags in any orientation and in any plane. This configuration is suitable for item level tracking in retail, conference attendees tracking, patient or asset tracking in hospital hallways, etc.



### 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.



For more information, visit: [www.rfidcanada.com](http://www.rfidcanada.com)  
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