

## 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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*SlimLine Doorway Portal Application*

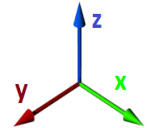


*A8065 antenna*

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 27.5 " x 3.4 " x 0.3 "	700 mm x 86 mm x 8 mm 27.5 " x 3.4 " x 0.3 "	700 mm x 86 mm x 8 mm 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 -4° to +131°F / -22° to +149°F	-20° to +55°C / -30° to +65°C -4° to +131°F / -22° to +149°F	-20° to +55°C / -30° to +65°C -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

	A8065 Dual Linear	A8065 Horizontal	A8065 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 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 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

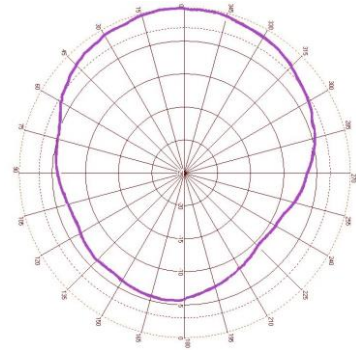
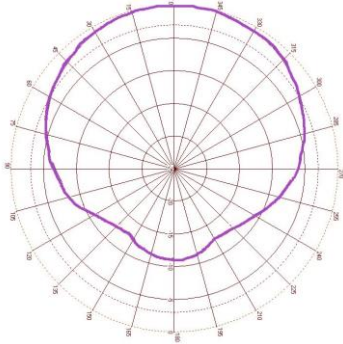
*(please quote both product code & part no.)*

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

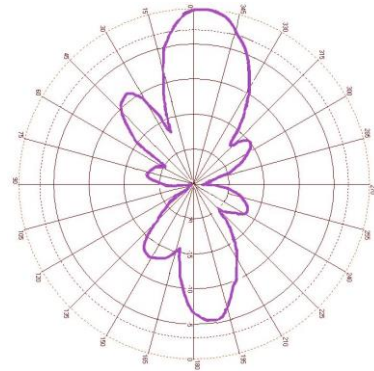
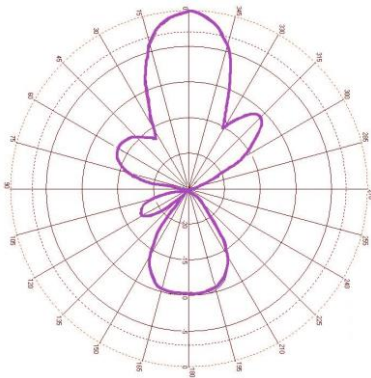
Product Code	Band	Part No.
A8065V	ETSI 864-868 MHz	71885
	FCC 902-928 MHz	71884
A8065H	ETSI 864-868 MHz	71887
	FCC 902-928 MHz	71886
A8065D	ETSI 864-868 MHz	71883
	FCC 902-928 MHz	71882
Cable Accessories	Cable Type	Part No.
Cable 2 m, SMA to RPTNC	LMR 195 / 240	71436 / 71782
Cable 4 m, SMA to RPTNC	LMR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

*Electric Field Radiation Patterns*

**A8065 Dual Linear**

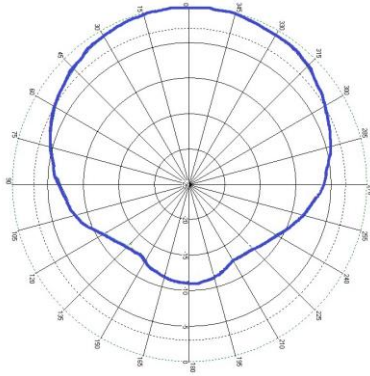


XZ-plane – Vertical Pol and Horizontal Pol

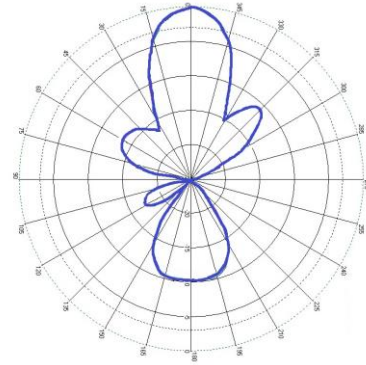


YZ-plane – Vertical Pol and Horizontal Pol

**A8065V**

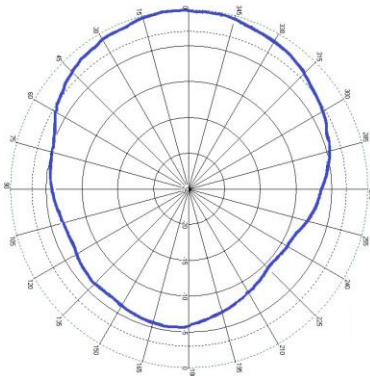


XZ-plane

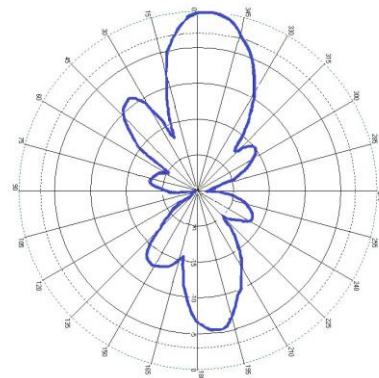


YZ-plane

**A8065H**



XZ-plane



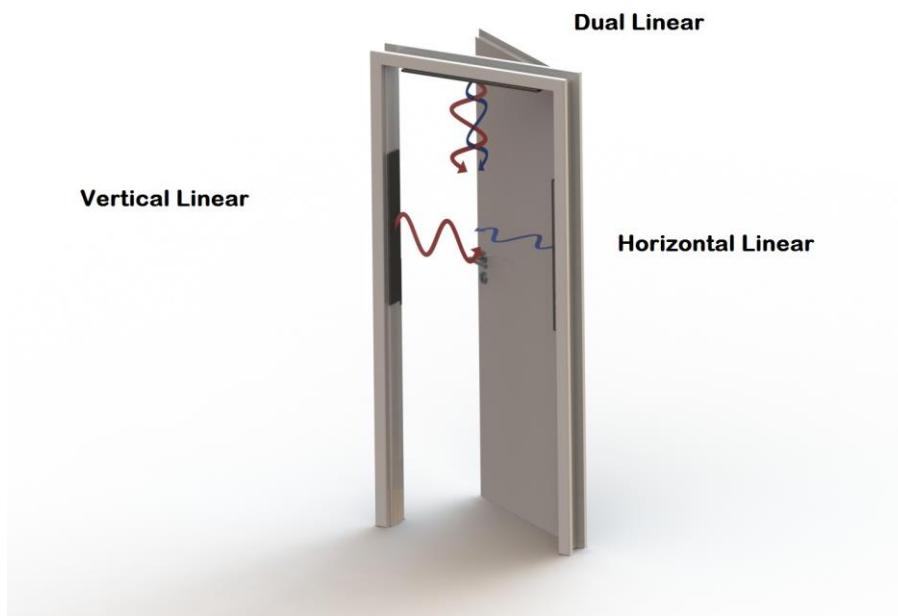
YZ-plane

## Mounting information

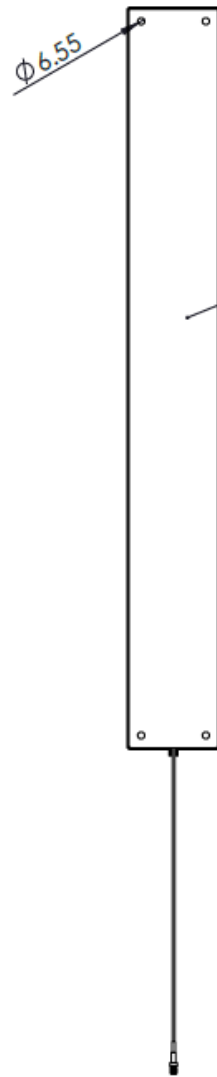
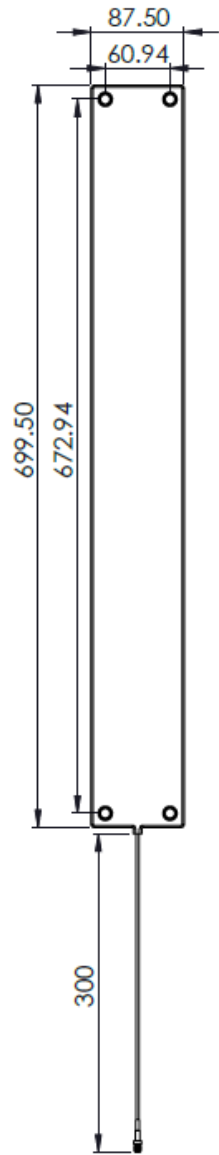
To mount the A8065 Combo, we recommend using the integrated mounting guides, which can be drilled through without damaging the antenna.

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  $\pm$   
ANGULAR: MACH  $\pm$  BEND  $\pm$   
TWO PLACE DECIMAL  $\pm$   
THREE PLACE DECIMAL  $\pm$

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.

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