

## ABOUT TIMES-7

We are a high-tech company specializing in the design and manufacture of RAIN (UHF) RFID antennas.

Our journey began in 2006, when Times-7 was founded. Since then, we have developed the largest portfolio of fixed RAIN RFID reader antennas, which are famous for their quality and performance.

We are based in Lower Hutt, New Zealand, but our reach extends worldwide as we export our products through our authorized partner network.

In addition to our world-class products and in-depth expertise, our customers appreciate Times-7's customer service and technical support.

We are responsive in supporting a large global customer base and ensuring the success of our customer's implementations.

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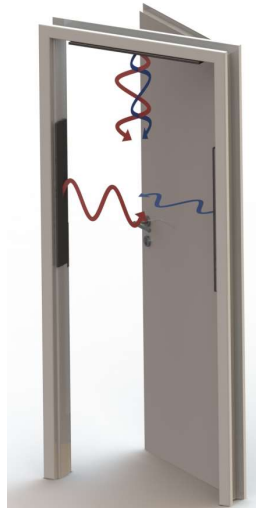
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Patent Info: [www.times-7.com/patents](http://www.times-7.com/patents)



**SlimLine™ Doorway Portal Application**



**A8065 Antenna**

Introducing the SlimLine A8065 Combo, an elegantly designed Doorway Portal Application that seamlessly integrates into your space while delivering exceptional performance with a complete 360° tag orientation read coverage.

This groundbreaking solution establishes a new industry benchmark by harmoniously combining three polarizations - Vertical Linear, Horizontal Linear on the sides, and Dual Linear on top. This unique configuration ensures reliable tag reading, regardless of its orientation.

With its remarkably slim profile, measuring just 10.5mm (0.4") in thickness, and a sleek 88mm (3.4") width, these antennas effortlessly integrates into door frames, optimizing space utilization in high-traffic areas. Each variant of the A8065 (D, V, H) can be acquired individually, or as a set, with its corresponding part number detailed below.

## Ordering Information

**Note: Please quote product code, band, cable type & part number**

*Antenna Product Code	Band	Part Number
A8065 Combo	ETSI 865-868 MHz	71881
A8065 Combo	FCC 902-928 MHz	71880
Cable Accessories Product Code	Cable Type	Part Number
Cable 2m, SMA to RPTNC	LMR 195 / 240 / 400	71436 / 71782 / 72042
Cable 4m, SMA to RPTNC	LMR 240 / 400	71784 / 72043
Cable 6m, SMA to RPTNC	LMR 240 / 400	71904 / 72044
Cable 8m, SMA to RPTNC	LMR 240 / 400	71788 / 72045

\*RoHS, Reach, CE compliant.

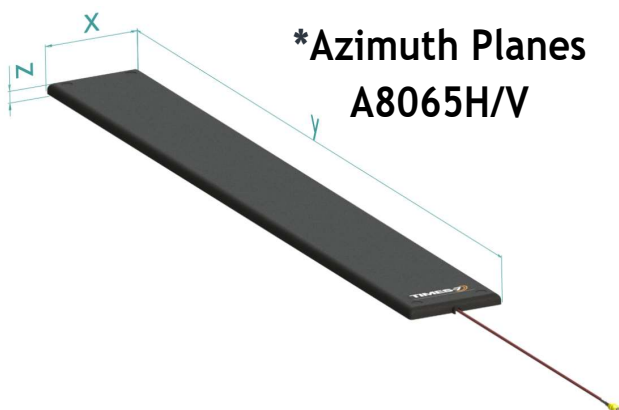
View the Times-7 Cable Accessory datasheet [here](#)

## Physical / Environmental Specifications

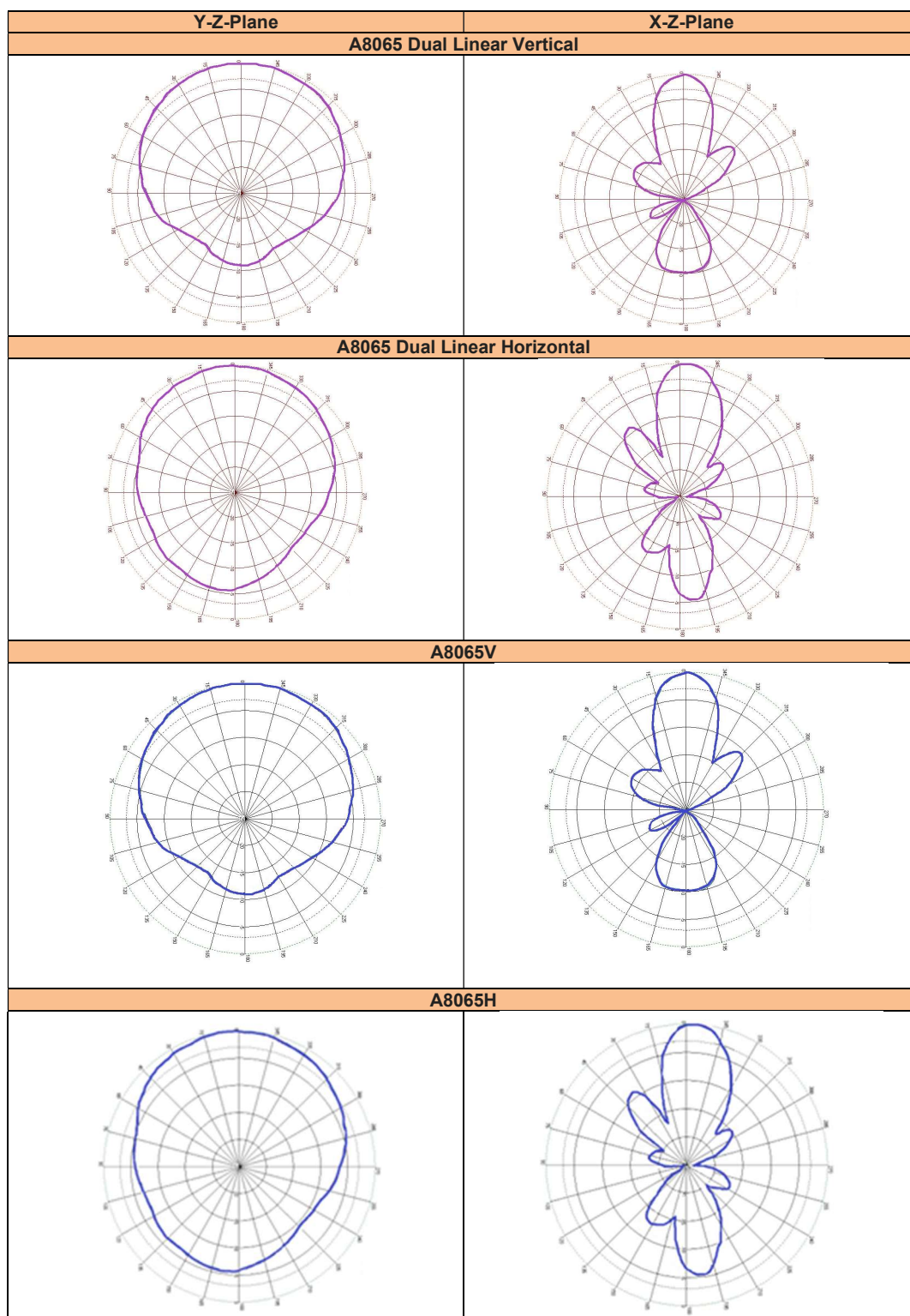
	A8065 Dual Linear	A8065 Horizontal	A8065 Vertical
<b>Unboxed Dimensions:</b> *Length (x) x Width (y) x Depth (z)	700 x 90 x 9.6mm 27.56" x 3.54" x 0.41"		
<b>Boxed unit dimensions:</b> (L x W x D)	725 x 115 x 25mm 28.54 x 4.53 x 0.89"		
<b>Weight:</b>	Net: 0.58kg / 1.28lbs. Gross: 0.69kg / 1.52lbs.		
<b>Radome Material:</b>	Flame retardant ABS		
<b>Environmental Rating:</b>	IP54		
<b>Operating / Storage Temperature:</b>	-20° to +55°C / -30° to +65°C -4° to +131°F / -22° to +149°F		
<b>Mounting:</b>	Integrated mounting guides / adhesive foam strip		
<b>Connector Type:</b>	SMA female lead		
<b>Cable / Length:</b>	RG-316 Cable / 300 mm / 1"		

## Electrical Specifications

	A8065 Dual Linear	A8065 Horizontal	A8065 Vertical
<b>Frequency Range:</b>	865-868 MHz (ETSI) / 902-928 MHz (FCC)		
<b>Polarization:</b>	Vertically & Horizontally Linear	Horizontally Linear	Vertically Linear
<b>Far-Field Gain:</b>	Horizontal: 3dBi typical; Vertical: 4dBi typical	6dBi typical	7.5dBi typical
<b>Far-Field 3dB Beamwidth:</b>	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-plane 110° in YZ-plane	25° in XZ-plane 120° in YZ-plane
<b>VSWR:</b>	2.5 typical	1.8 typical	1.8 typical
<b>Front-To-Back Ratio:</b>	Vertical Pol: -5dB; Horizontal Pol: -10dB	-6dB	-12dB
<b>Nominal Impedance:</b>	50Ω		
<b>Anti-Static Protection:</b>	Yes, DC grounded		
<b>Antenna Detection</b>	10kΩ resistance		
<b>Maximum Input Power:</b>	3W		



## Radiating Patterns



## Applications

### Comprehensive Doorway Solution

The A8065 Combo offers a complete doorway solution comprising three distinct antennas: A8065V, A8065H, and A8065D. Positioned on either side of the doorway, the A8065V and A8065H antennas are vertically and horizontally linearly polarized, respectively. In addition to these side antennas, the combo includes a single overhead antenna, the A8065D, which boasts dual linear polarization with two ports. The A8065D emits RF signals that are linearly polarized both horizontally and vertically. This versatile A8065 combo can read tags in any orientation and plane, making it ideal for various applications such as item-level tracking in retail, tracking conference attendees, and monitoring patients or assets in hospital hallways, among others.



## Installation Instructions

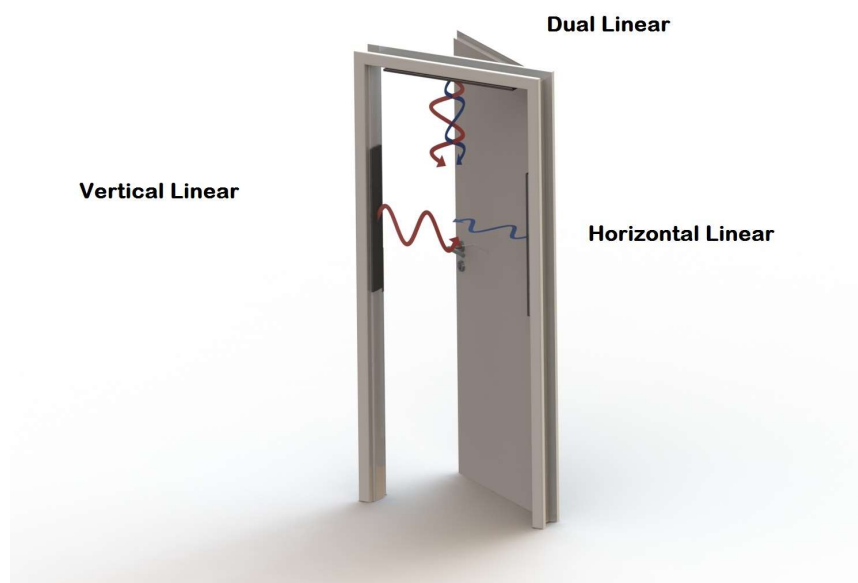
Please note the following precautions:

- Ensure that only finger tightness is used for the SMA connector.
- Use of tools to tighten the connector will apply excessive force and will damage the connector.
- Avoid any load or bending force from the cable on the connector.

### Flush mount

The A8060 has 4 drill guides on the antenna radome, which can be drilled through without damaging the antenna. For the exact position please refer to the mechanical drawing. For further instructions please click [here](#).

## Polarization of the A8065 Combo



Combining three polarizations - Vertical Linear and Horizontal Linear mounted on the sides, and Dual Linear on top of the doorframe - guarantees reading coverage regardless of the tag orientation.

## Extra Ordering Information

**Note: Please quote product code, band, cable type & part number**

*Antenna Product Code	Band	Part Number
A8065V	ETSI 865-868 MHz	71885
	FCC 902-928 MHz	71884
A8065H	ETSI 865-868 MHz	71887
	FCC 902-928 MHz	71886
A8065D	ETSI 865-868 MHz	71883
	FCC 902-928 MHz	71882

\*RoHS, REACH, CE compliant.

View the Times-7 Cable Accessory datasheet [here](#)

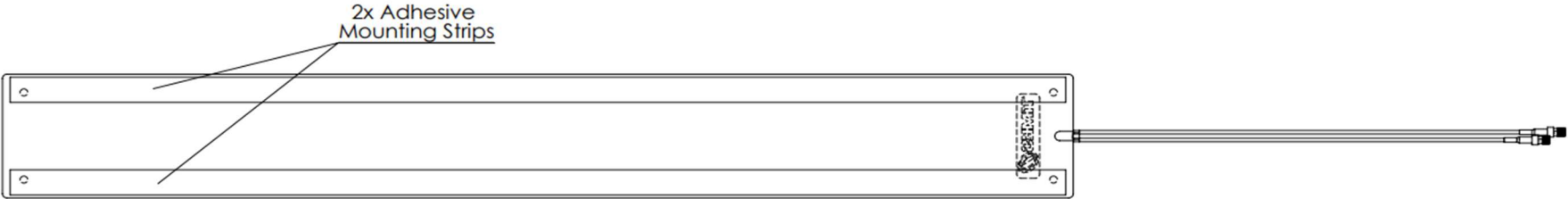
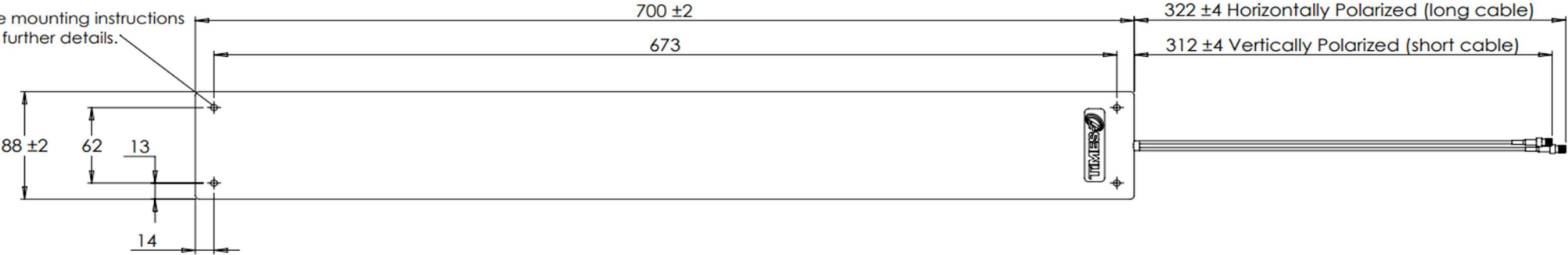
Mechanical Drawing for the A8065 Dual Linear Door Frame Antenna



Mounting guide for  
Ø 6 screws/bolts or smaller (4 places).

Marker on front surface,  
pre-drilled on rear.

See mounting instructions  
for further details.



THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF TIMES-7 LTD. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF TIMES-7 IS PROHIBITED.		DIMENSIONS ARE IN mm UNLESS OTHERWISE SPECIFIED TOLERANCES: NO DECIMAL PLACES ± 1 ONE PLACE DECIMAL ± 0.8			DESCRIPTION A8065D Dual Linearly Polarized Door Frame Antenna	
DRAWN BY: Maria Price		DATE: 26-10-23		SIZE PART NO. <b>A3</b> 71883 (ETSI), 71882 (FCC)		REV <b>D</b>
APPROVED BY: Peter Wilcock		DATE: 26-10-23		DO NOT SCALE DRAWING		SHEET 1 OF 1



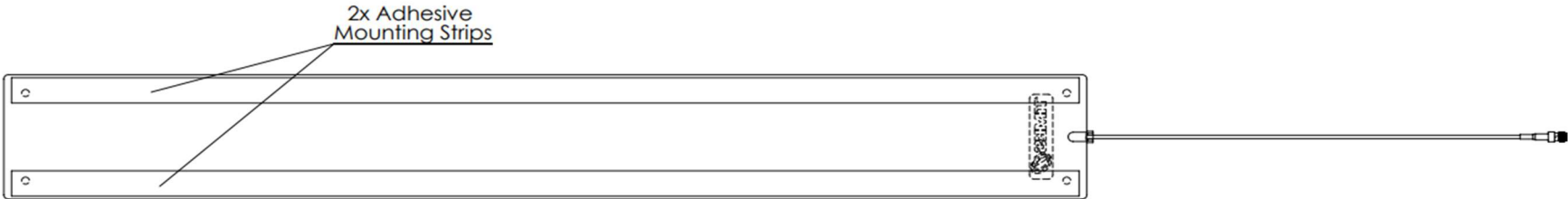
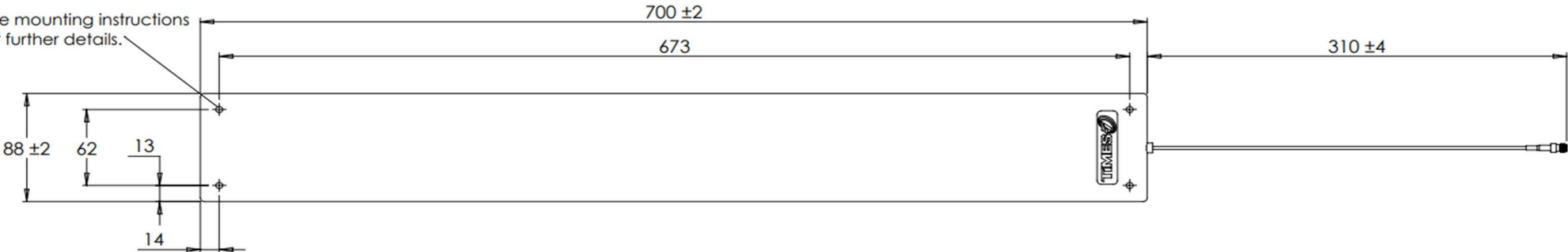
Mechanical Drawing for the A8065 Horizontally and Vertically Polarized Door Frame Antenna



Mounting guide for  
Ø 6 screws/bolts or smaller (4 places).

Marker on front surface,  
pre-drilled on rear.

See mounting instructions  
for further details.



Part No.	Description
71885	A8065V Vertically Polarized Door Frame Antenna (ETSI)
71884	A8065V Vertically Polarized Door Frame Antenna (FCC)
71887	A8065H Horizontally Polarized Door Frame Antenna (ETSI)
71886	A8065H Horizontally Polarized Door Frame Antenna (FCC)

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF TIMES-7 LTD. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF TIMES-7 IS PROHIBITED.	DIMENSIONS ARE IN mm UNLESS OTHERWISE SPECIFIED TOLERANCES: NO DECIMAL PLACES ± 1 ONE PLACE DECIMAL ± 0.8		DESCRIPTION				
			A8065H Horizontally & Vertically Polarized Door Frame Antenna				
			DRAWN BY: Maria Price		DATE: 26-10-23	SIZE   PART NO. <b>A3</b> Refer to table	REV <b>D</b>
			APPROVED BY: Peter Wilcock		DATE: 26-10-23	DO NOT SCALE DRAWING	
			SHEET 1 OF 1				