

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.

Times-7
29 Railway Avenue
Lower Hutt 5010
New Zealand

NEW ZEALAND
P: +64 4 974 6566

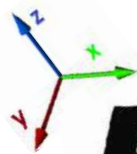
USA/CANADA
P: +1 408 769 5025

E: info@times-7.com

www.times-7.com



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 (10.5 mm / 0.4") and slim dimensions of each antenna (88 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 x 90 x 10.5 mm 27.5" x 3.5" x 0.4"		
Weight:	0.55 kg / 1.1 lbs.		
Radome Material:	Fire retardant ABS		
Environmental Rating:	IP54		
Operating / Storage Temperature:	-20° to +55°C / -30° to +65°C -4° to +131°F / -22° to +149°F		
Mounting:	Integrated mounting guides / Adhesive foam strip		
Connector type / position:	SMA female side fly lead (300 mm / 1')		
Cable:	RG-316 Cable		

Electrical Specifications

	A8065 Dual Linear	A8065 Horizontal	A8065 Vertical
Frequency Range:	865-868 MHz (ETSI) / 902-928 MHz (FCC)		
Polarization:	Vertical & Horizontal Linear	Horizontal Linear	Vertical Linear
Far-field Gain:	Horizontal: 3dBi typical; Vertical: 4dBi typical	6 dBi typical	7.5 dBi typical
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
VSWR:	2.5 typical	1.8 typical	1.8 typical
Front to back ratio:	Vertical Pol: -5dB; Horizontal Pol: -10dB	-6 dB	-12 dB
Nominal Impedance:	50 Ω		
Anti-static protection:	Yes, DC grounded		
Antenna Detection	10 k Ω resistance		
Maximum Input Power:	3 W		

Ordering Information

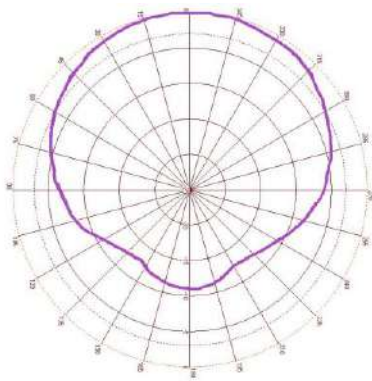
(please quote both product code & part no.)

Product Code	Band	Part No.
A8065 Combo	ETSI 865-868 MHz	71881
A8065 Combo	FCC 902-928 MHz	71880

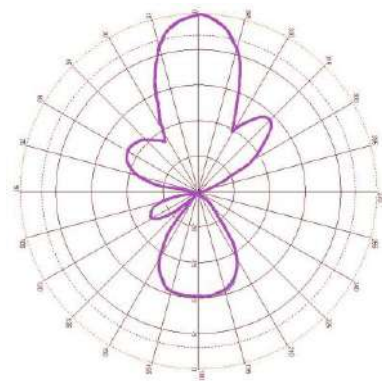
Product Code	Band	Part No.
A8065V	ETSI 865-868 MHz	71885
	FCC 902-928 MHz	71884
A8065H	ETSI 865-868 MHz	71887
	FCC 902-928 MHz	71886
A8065D	ETSI 865-868 MHz	71883
	FCC 902-928 MHz	71882
Cable Accessories	Cable Type	Part No.
Cable 2 m, SMA to RPTNC	LMR 195 / 240 / 400	71436 / 71782 / 72042
Cable 4 m, 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

Electric Field Radiation Patterns

A8065 Dual Linear Vertical Pol

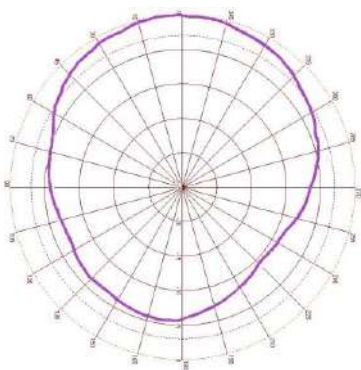


YZ-plane – Vertical Pol

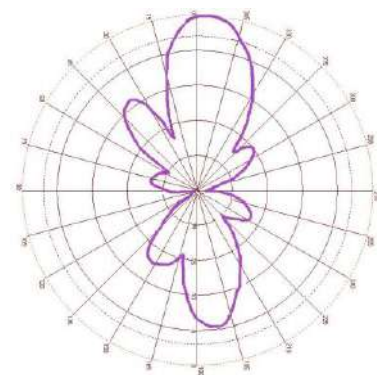


XZ-plane – Vertical Pol

A8065 Dual Linear Horizontal Pol

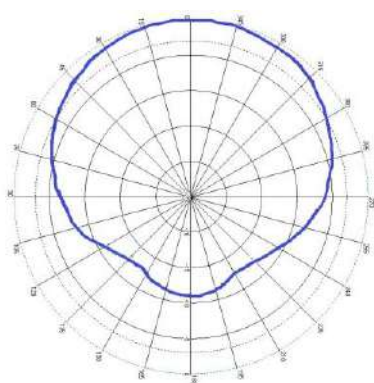


YZ-plane – Horizontal Pol

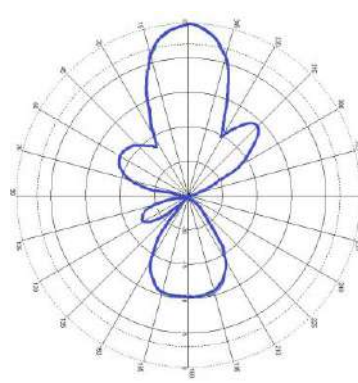


XZ-plane – Horizontal Pol

A8065V

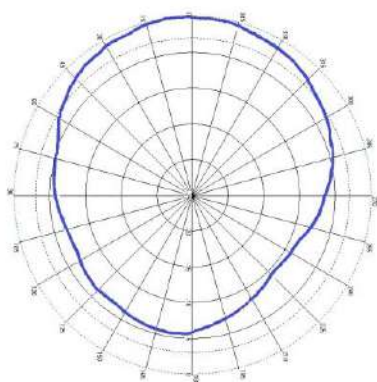


YZ-plane

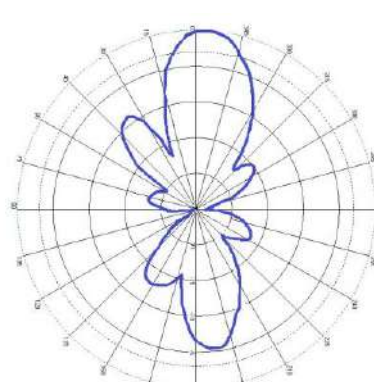


XZ-plane

A8065H

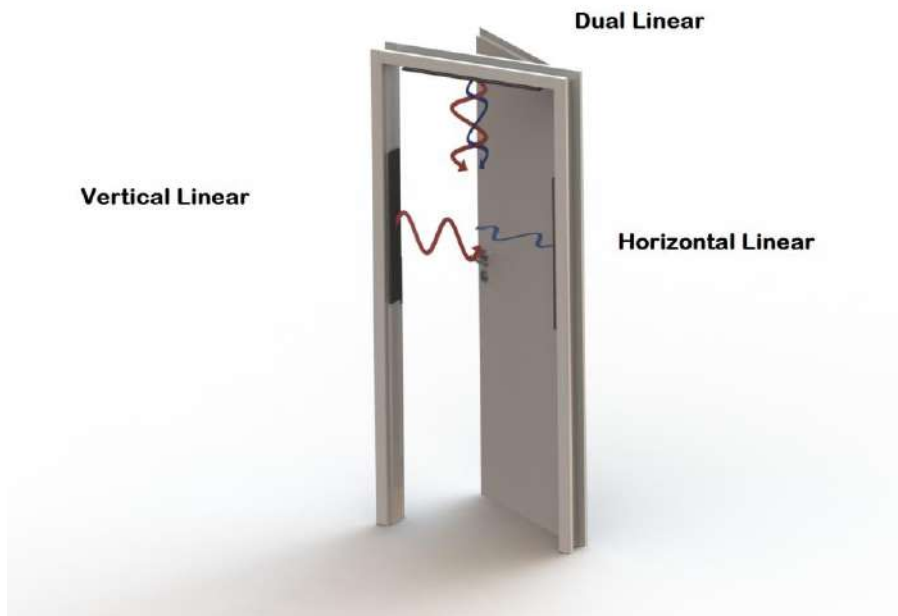


YZ-plane

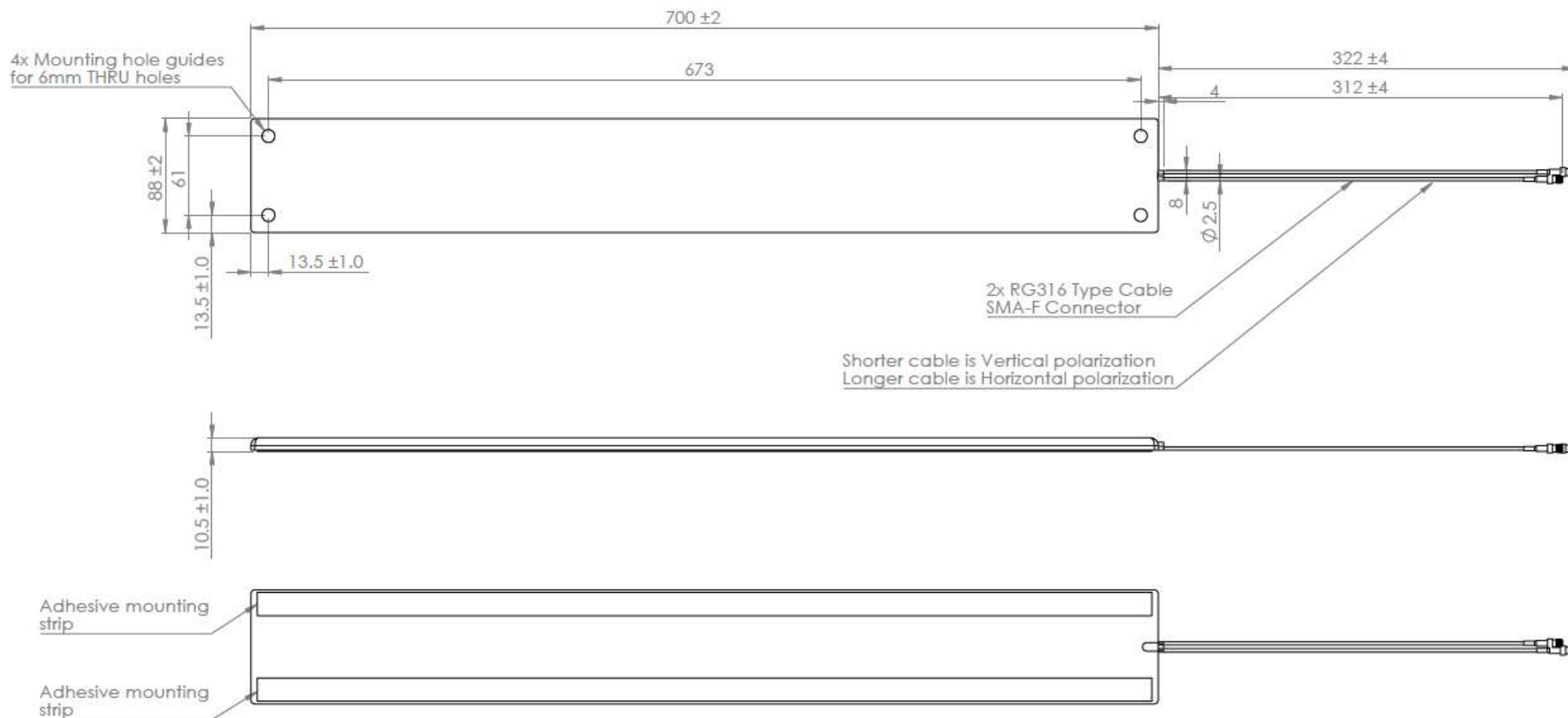


XZ-plane

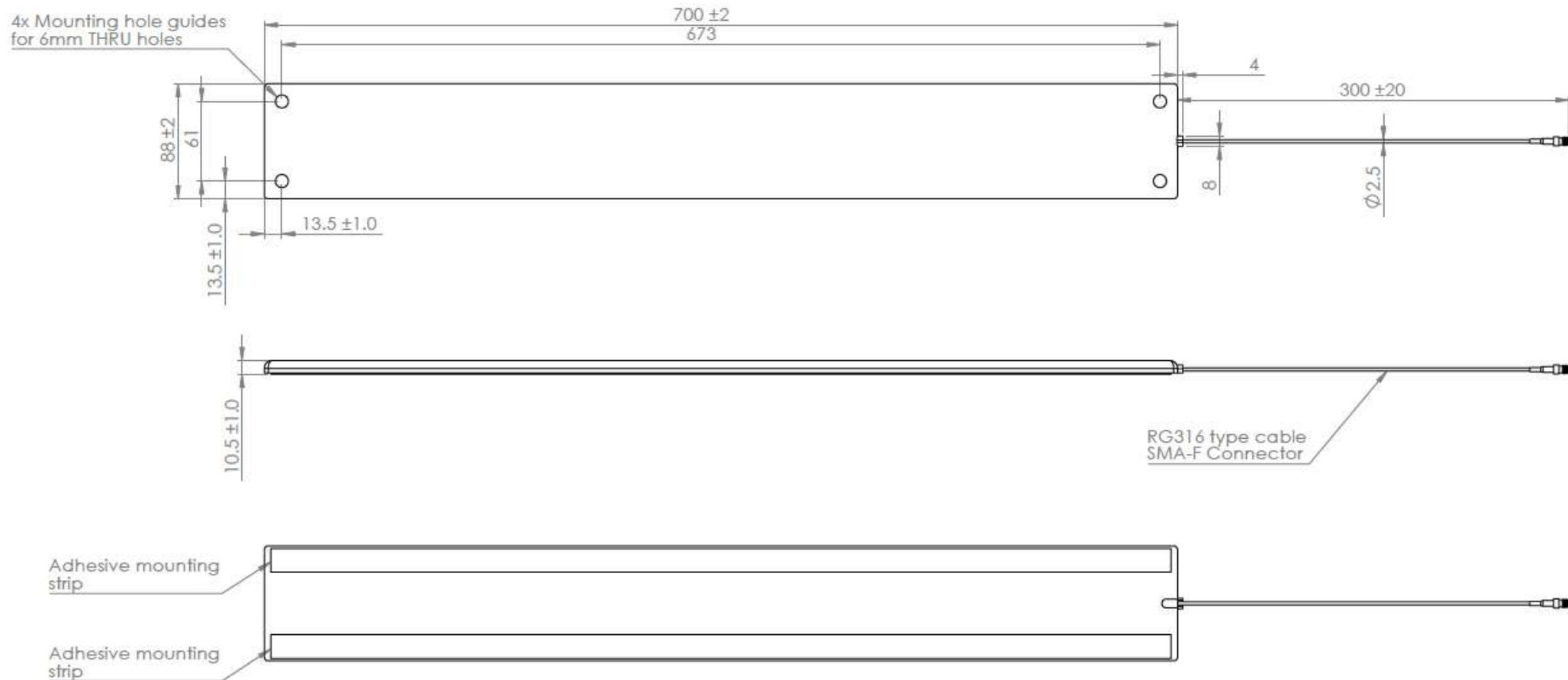
Polarization of the A8065 Combo



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.



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 ± 0.5		DESCRIPTION A8065 Dual Linear Antenna FCC / ETSI	
DRAWN C Wilson	SIGNATURE 	DATE 27/11/2018	SIZE A3	PART NO. 71882 / 71883	REV B
APPROVED P Roling	SIGNATURE 	DATE 27/11/2018	DO NOT SCALE DRAWING		SHEET 1 OF 1



Part Number Table	
Part No.	Description
71885	A8065 Vertical ETSI
71884	A8065 Vertical FCC
71887	A8065 Horizontal ETSI
71886	A8065 Horizontal 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 ± 0.5		 A8065 Horizontal & Vertical Polarized Antenna	
DRAWN C Wilson	SIGNATURE 	DATE 27/11/2018	SIZE A3	PART NO. See part number table	REV B
APPROVED P Roling	SIGNATURE 	DATE 27/11/2018	DO NOT SCALE DRAWING		SHEET 1 OF 1

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.

Times-7 Research Ltd
29 Railway Avenue
Lower Hutt 5010
New Zealand

NEW ZEALAND
P: +64 4 974 6566

USA/CANADA
P: +1 408 769 5025

E: info@times-7.com

www.times-7.com

The technical data contained in this publication is not a guarantee for which Times-7 Research Ltd assumes legal accountability. It is indicative of typical performance, and if required should be relied on for specific applications only after due verification.

All technical data, specifications and other information contained herein are deemed to be the proprietary intellectual property of Times-7 Research Ltd. No reproduction, copy or use thereof may be made without the express written consent of Times-7 Research Ltd.