

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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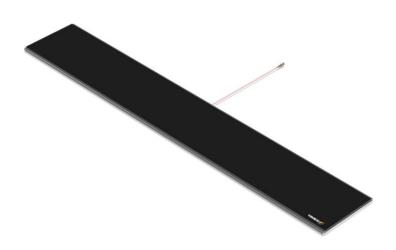
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The A5531 Ground Antenna

As part of Times-7's unique and exclusive range of ground antennas, the A5531 Circularly Polarized Antenna stands out as a high-performance ground antenna optimized for various applications involving moving products, assets, and people. Whether it's conference attendee and people tracking or race timing, the A5531 excels in scenarios where traditional side antennas may be unsuitable or non-optimized for the task.

Measuring just 10mm (0.4 inches) in thickness, the A5531 is not only low-profile but also exceptionally robust, designed to lie flat on the ground. This antenna spans 1.2m (4ft) and can handle payloads of over 200kg (440lbs), making it a versatile and durable choice for various applications.

Ordering Information

Ordering Information (please quote product code, band / cable type & part no.)

*Antennas Product Code	Band	Part No.
A5531C	ETSI 865-868 MHz	71846
	FCC 902-928 MHz	71741
A5531V	ETSI 865-868 MHz	71103
	FCC 902-928 MHz	71100
A5531H	ETSI 865-868 MHz	On request
	FCC 902-928 MHz	On request

^{*}Built in New Zealand. RoHS & CE compliant.

Cable Accessories Product Code	Cable Type	Part No.
Cable 2m, SMA to RPTNC	T7 195 / 240 / 400	71436 / 71782 / 72042
Cable 4m, SMA to RPTNC	T7 240 / 400	71784 / 72043
Cable 6m, SMA to RPTNC	T7 240 / 400	71904 / 72044
Cable 8m, SMA to RPTNC	T7 240 / 400	71788 / 72045

View the Times-7 Cable Accessory datasheet here



Payload Information

This ground antenna is designed to support moderate loads, such as hand trolleys and carts with rubber wheels, runners, bicyclists, and occasional vehicular traffic with pneumatic tires, etc. Care must be taken to ensure the antenna is installed on a smooth, hard, flat surface. Ensure that the antenna surface is not damaged from sharp objects such as steel-edged wheels, stone chips, or glass fragments, etc. Any point load must not exceed 100 psi (7kg/ cm2) and the maximum distributed load on the antenna should not exceed 1100lb (500kg).

Physical/Environmental Specifications

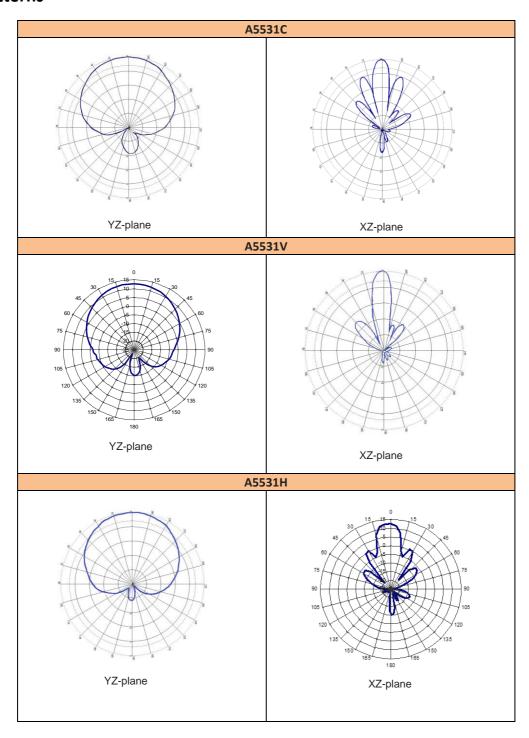
Specifications	A5531C	A5531L	
		A5531V	A5531H
Unboxed Dimensions:	1200 x 195 x 10mm		
*Length (x) x Width (y) x Depth (z)	47.24 x 7.67 x 0.39"		
Boxed unit dimensions:	1380 x 330 x 40mm		
(L x W x D)	51.18 x 13 x 1.57"		
Weight:	Net: 2.7 kg / 5.9lbs. Gross: 3.8Kg / 8.37lbs.		
Radome Material:	Fire retardant ABS		
Environmental Rating:	IP53		
Operating / Storage Temperature:	0° to +50°C / -30° to +60°C		
	32° to +122°F / -22° to +140°F		
Connector Type / Position:	SMA female side fly lead		
Cable Type / Length:	195 / 298mm / 11.7"		

Electrical Specifications

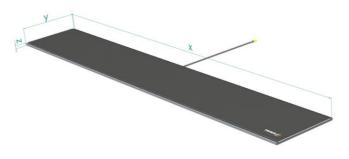
Specifications	A5531C	A5531L	
		A5531V	A5531H
Frequency Range:	864-868 MHz / 902-928 MHz		
Polarization:	RHCP (Right Hand	Vertical Linear	Horizontal Linear
	Circularly Polarised)		
Far-field Gain:	9.5dBiC typical	10dBi typical	10dBi typical
Far-field 3dB Beamwidth: *	13° in XZ, 85° in YZ	25° in XZ, 70° in YZ	13° in YZ, 85° in XZ
VSWR:	2.0 typical	2.0 typical	2.5 typical
Front-To-Back Ratio:	-18dB	-20dB	-18dB
Nominal Impedance:	50Ω		
Anti-Static Protection:	Yes, DC grounded		
Antenna Detection:	10k Ω resistance		
Maximum Input Power:	3W		



Radiation Patterns



Azimuth Planes





Installation Instructions

- 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.
- For any connector antenna: Avoid any load or bending force from the cable on the connector.
- We recommend covering the antenna's radome with RF transparent material for protection.

Applications

Conference Attendee / People Tracking

The A5531 antenna is suitable for use in a variety of indoor and outdoor environments that require an ultra-low profile, high-performance antenna that can be concealed under a mat or other covering. Perfect for tracking attendees at conferences or sporting events.



Industrial Asset Tracking

Locate assets and personnel with our RFID antenna asset tracking solutions. When a vital component goes missing mid-manufacturing order, it causes a severe hold-up in the process, which in turn has a knock-on effect that makes the entire system inefficient. The A5531 antenna makes it easy to locate equipment in today's climate where operational productivity is key.



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.

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Mechanical Drawing for the A5531C Circularly Polarized Antenna 600±2 -SMA-F Connector 298±5 -T7195 Type Cable 195 1200±2 -10

