

A5531 SlimLine RAIN (UHF) GROUND ANTENNA

ABOUT TIMES-7

We are a high-tech company specializing in the design and manufacture of RAIN (UHF) RFID antennas. Founded in 2006, Times-7 has developed the largest portfolio of fixed RAIN RFID reader antennas. Based in Lower Hutt, New Zealand we export all over the world through an authorized network.

Times-7 antennas are famous for their quality and performance.

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.

Times-7 Research Ltd 10 Te Puni Street Lower Hutt 5012 New Zealand

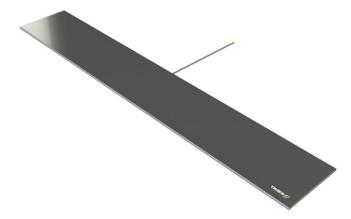
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Ultra-low profile ground antenna

Just 10 mm / 0.4 in. thick

Typical applications:
Conference attendee & people
tracking, retail marketing,
race & event timing

The A5531 Ground Antenna

Part of the Times-7 unique and exclusive range of ground antennas, the A5531 is a high-performance ground antenna optimised for applications involving moving products, assets and people. From conference attendee & people tracking, retail presence aware / loyalty marketing, & race timing, the A5531 is ideal for situations where traditional side antennas are unsuitable or non-optimised for the application.

At just 10 mm / 0.4 in. thick, the durable, high performance A5531 is uniquely capable of lying flat on the ground and spans 1.2m / 4ft and can withstand payloads of over 200 kg (440 lbs.).

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 2 m, SMA to RPTNC	T7 195 / 240 / 400	71436 / 71782 / 72042
Cable 4 m, SMA to RPTNC	T7 240 / 400	71784 / 72043
Cable 6 m, SMA to RPTNC	T7 240 / 400	71904 / 72044
Cable 8 m, SMA to RPTNC	T7 240 / 400	71788 / 72045





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 (7 kg/cm2) and the maximum distributed load on the antenna should not exceed 1100lb (500kg).

Specifications

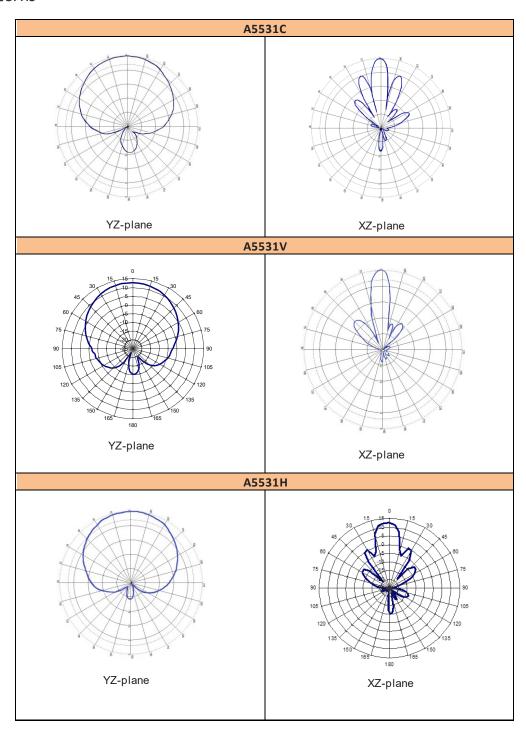
Specifications	A5531C	A5531L	
		A5531V	A5531H
Dimensions	1200 mm x 195 mm x 10 mm		
Length (x) x Width (y) x Depth (z)	47.24" x 7.67" x 0.39"		
Boxed unit dimensions:	1380 mm x 330 mm x 40 mm		
(LxWxD)	51.18" x 13" x 1.57"		
Weight:	Net: 2.7 kg / 5.9 lbs. Gross: 3.8 Kg / 8.37 lbs.		
Radome Material:	Fire retardant ABS		
En vironmental 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

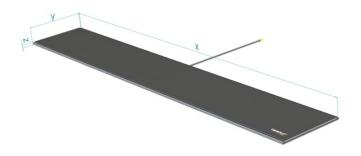
Specifications	A5531C	A5531L		
		A5531V	A5531H	
Frequency Range:		864-868 MHz / 902-928 MHz		
Polarization:	RHCP (Right Hand	Vertical Linear	Horizontal Linear	
	Circular Polarised)			
Far-field Gain:	9.5 dBiC typical	10 dBi typical	10 dBi typical	
Far-field 3 dB beamwidth: *	13° in XZ, 85° in YZ	25° 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:	-18 dB	-20 dB	-18 dB	
Nominal Impedance:	50 Ω			
Anti-static protection:	Yes, DC grounded			
Antenna Detection	10 k Ω resistance			
Maximum Input Power:	3 W			



Radiation Patterns



Azimuth Planes



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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 RFID 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.



GLOBAL SUPPORT

In addition to our world-class products
and in-depth expertise, Times-7 is
known for their quality of customer
service and technical support. We
place emphasis on our responsiveness
in supporting a large global customer
base and ensuring the success of our
customer's implementations.

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 serious 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.



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Mechanical Drawing for the A5531C 600±2 -SMA-F Connector 298±5 -T7195 Type Cable 195 1200±2 -10 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. TO DECIMAL PLACES ± 1 ONE PLACE DECIMAL ± 0. DESCRIPTION UNLESS OTHERWISE SPECIFIED TOLERANCES: NO DECIMAL PLACES ± 1 ONE PLACE DECIMAL ± 0.5 A5531C Antenna

DRAWN

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07/08/2019

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SHEET 1 OF 1

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DO NOT SCALE DRAWING

