

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

NEW ZEALAND
P: +64 4 974 6566

USA/CANADA
P: +1 408 769 5025

E: sales@times-7.com

www.times-7.com



Patent Info: times-7.com/patents



The SlimLine™ A5010

- Up to 8m / 29 ft. read range
- Just 14mm / 0.55 in. thick
- High performance & rugged design
- IP67 rating for permanent outdoor use and industrial applications

The Times-7 industry leading ultra-low-profile design is in a compact 250 mm / approx. 10 in. square footprint. IP67 rated for permanent outdoor use and built to Times-7's high standard for quality and robustness, the circularly polarized A5010 creates a new benchmark for multi-purpose UHF RFID antennas.

Order Information

(please quote both product code & part no.)

*Antenna Product Code	Band	Part No.
A5010 (Flush Mounted)	FCC 902-928 MHz	60001
A5010 (Flush Mounted)	ETSI 865-868 MHz	60002
A5010 (Stud Mounting)	FCC 902-928 MHz	60003
A5010 (Stud Mounting)	ETSI 865-868 MHz	60004
Cable Accessories	Cable Type	Part No.
Cable 2 m, SMA to RPTNC	T7195 / 240	71436 / 71782
Cable 4 m, SMA to RPTNC	T7 195 / 240	71437 / 71784
Cable 6 m, SMA to RPTNC	T7 240	71904
Cable 8 m, SMA to RPTNC	T7 195 / 240	71438 / 71788

*ROHS & CE compliant.

Specifications:

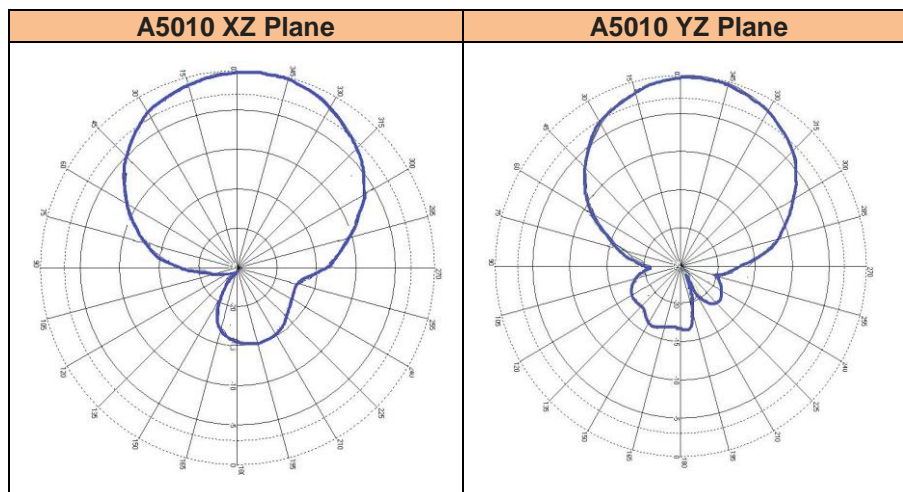
Physical / Environmental Specifications

Dimensions	250 mm x 250 mm x 14 mm
Length (x) x Width (y) x Depth (z):	9.85" x 9.85" x 0.55"
Boxed unit dimensions: (L x W x D)	Flush: 280 mm x 255 mm x 20 mm 11.02" x 10.03" x 0.78" Stud: 310 mm x 280 mm x 40 mm 14.96" x 11.02" x 1.57"
Weight:	Net: 0.575 kg / 1.26 lbs. Gross Stud: 0.695Kg / 1.53 lbs. Gross Flush: 0.728Kg / 1.60 lbs.
Radome Material:	UV-Resistant ABS
Environmental Rating:	IP67
Operating / Storage Temperature:	0° to +65°C / 0° to +65°C -4° to +131°F / -22° to +149°F
Mounting:	Flush or VESA mount (mounting info on page 4)
Connector type / position:	SMA female side connector
A5010 Flush screw	Screw #8x1" s/s phillips white pan head

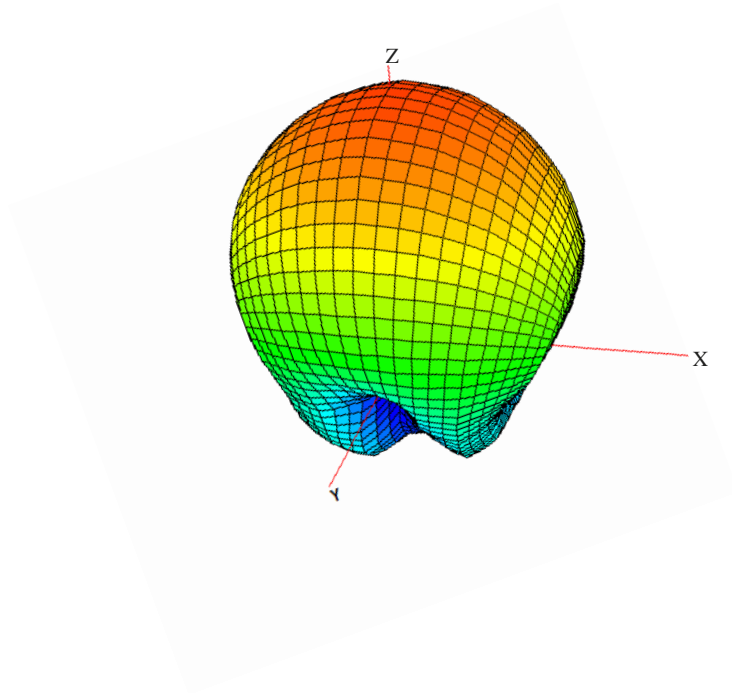
Electrical Specifications:

Frequency Range:	865-868 MHz / 902-928 MHz
Polarization:	RHCP (Right Hand Circular Polarized)
Far-field Gain:	8.5 dBiC typical
Far-field 3 dB beamwidth: *	68° in both planes
VSWR:	1.3 typical
Front to back ratio:	-20 dB
Axial ratio:	1 dB typical
Nominal impedance:	50 Ω
Anti-static protection:	Yes, DC grounded
Antenna detection	10 K Ω resistance
Maximum Input Power:	3 W

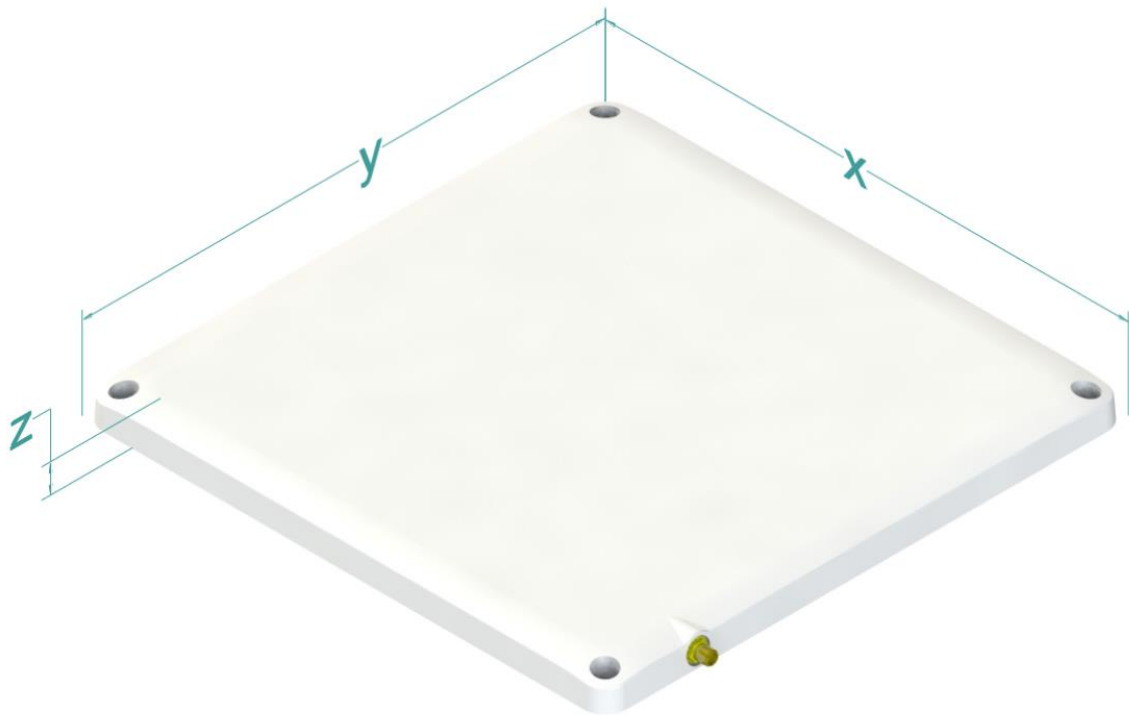
Radiation Pattern:



3D E-field radiation



Azimuth Planes



Environmental Test

Test	Standard	Duration	Temperature	Notes
Thermal Shock (non op)		1 Hr.	-45 / 70° C	3 cycles
Humidity		72 Hours	85° C RH	
Dust Resistance	IEC 60529	8 Hrs.		with vacuum
Solar Radiation		4 Days		340 nm
Impact Resistance				1 lb ball drop at 24" X 6 (top/bottom/sides)
Salt Fog	Mil-Std-810G	24 Hrs. in-24 Hrs out		2 cycles
Vibration Vehicle	Mil-Std-810G	1 Hr. X 3 axes		10-500 Hz, 1.04 Grms,
Shock-Half Sine	Mil-Std-810G			10 G / 11 ms, 5 shocks x 6 directions
Shock-Drop	Mil-Std-810G			26 drops @ 48"
HighTemp Storage		24 Hrs. each temp		60C, 65C, 70C, 80C, 85C, 90C & 95C

All reliability and performance measurement have been performed by certified, independent laboratories. Full reports are available on request.

Mounting Options

The 5010 is designed to support either flush or VESA mount. To accommodate both approaches, versions with either flush or studded backplates are supported.

With part numbers 60001 and 60002, flush mounting can be accommodated by attaching via screws or bolts through the corner holes in the housing or by using double sided industrial tape on the backplate.

The studs on part numbers 60003 and 60004 are on 100 mm spacing which will support standard VESA brackets available from a wide range of suppliers.



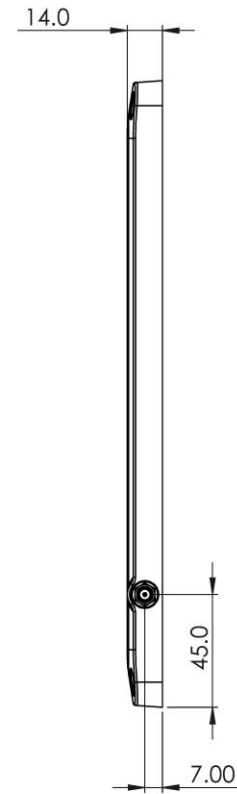
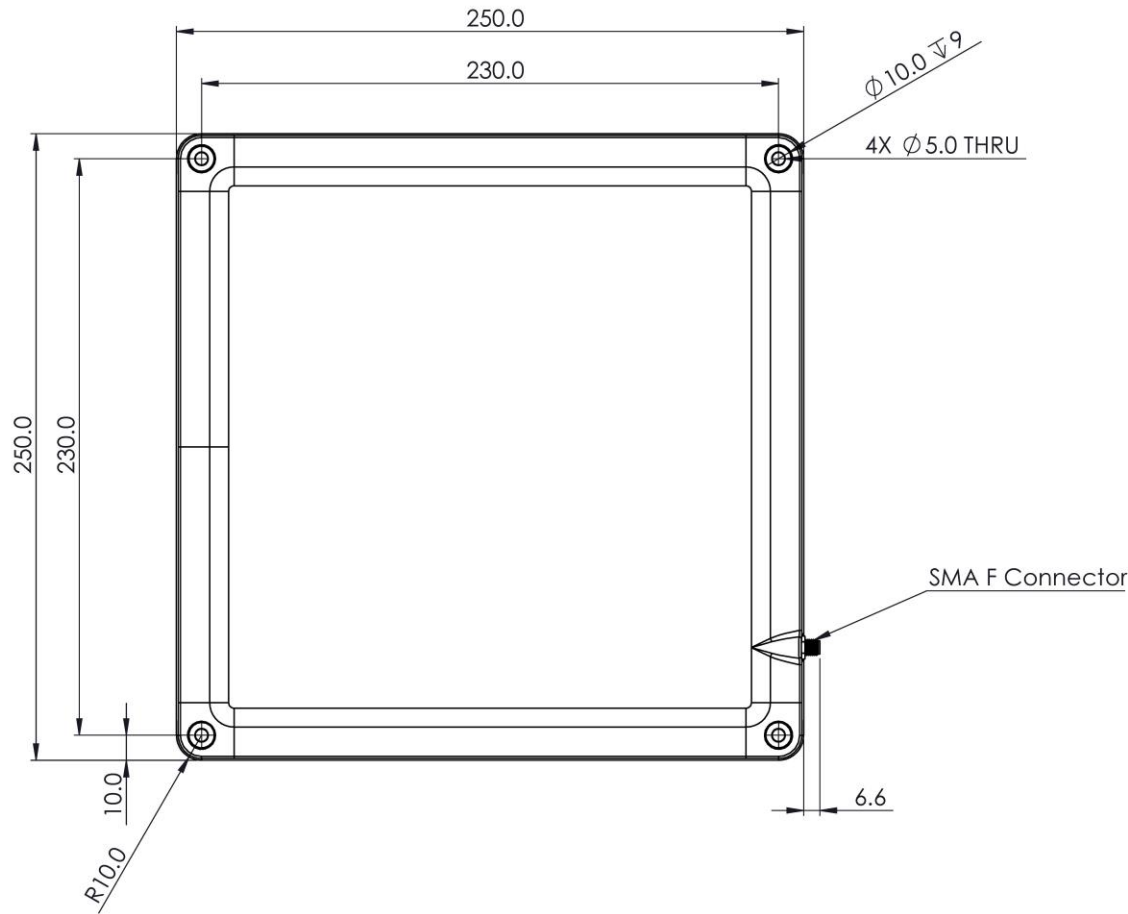
A5010 Stud mounted on a [VESA bracket](#) available from a wide range of suppliers.

Installation Instructions

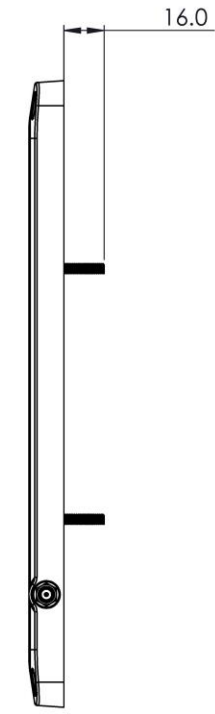
- Ensure that only finger tightness is used for the SMA connector. Use of tools to tighten the connector will apply excessive force and will damage the connector.
- Avoid any load or bending force from the cable on the connector.

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

Mechanical Drawing for the A5010 flush and stud



Flush Mount

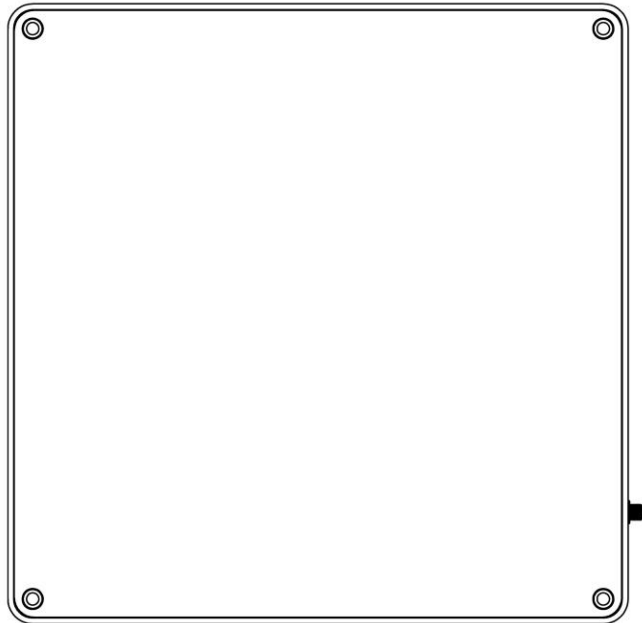


Studded

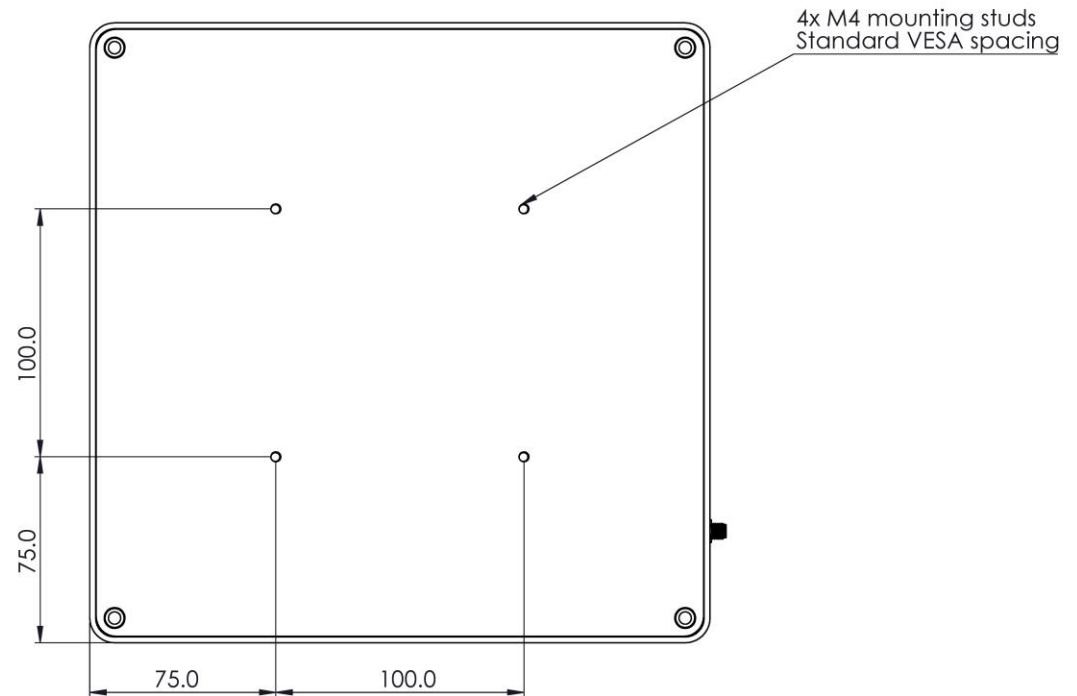
Description	Part Number
A5010 (Flush Mounted) FCC	60001
A5010 (Flush Mounted) ETSI	60002
A5010 (Studded) FCC	60003
A5010 (Studded) ETSI	60004

<small>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.</small>	<small>DIMENSIONS ARE IN mm UNLESS OTHERWISE SPECIFIED TOLERANCES: NO DECIMAL PLACES ± 1 ONE PLACE DECIMAL ± 0.5</small>		DESCRIPTION		
			A5010 Antenna		
DRAWN R Lopez	SIGNATURE <i>[Signature]</i>	DATE 08/08/2019	SIZE A3	PART NO. Refer to Table	REV B
APPROVED C Wilson	SIGNATURE <i>[Signature]</i>	DATE 19/09/2019	DO NOT SCALE DRAWING		SHEET 1 OF 2

A5010 non-studded backplate - flush mount



A5010 studded backplate - VESA mount



Description	Part Number
A5010 (Flush Mounted) FCC	60001
A5010 (Flush Mounted) ETSI	60002
A5010 (Studded) FCC	60003
A5010 (Studded) ETSI	60004

<small>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.</small>		<small>DIMENSIONS ARE IN mm UNLESS OTHERWISE SPECIFIED TOLERANCES: NO DECIMAL PLACES ± 1 ONE PLACE DECIMAL ± 0.5</small>				DESCRIPTION <p style="text-align: center;">A5010 Antenna</p>	
DRAWN R Lopez	SIGNATURE 	DATE 08/08/2019	SIZE A3	PART NO. Refer to Table	REV B	DO NOT SCALE DRAWING	
APPROVED C Wilson	SIGNATURE 	DATE 19/09/2019			SHEET 2 OF 2		

Applications

Medical & Pharmaceutical

The A5010 can operate at temperatures as low as 0° Celsius. High-value pharmaceutical assets can be tracked in fridges and freezers using the A5010 antenna. The slim design maximizes the usable space inside a refrigerator. The antenna can handle general-purpose cleaning agents and is water-resistant. The white-colored A5010 antenna is suitable for hospitals, medical laboratories, research industries, and pharma labs.



Retail

The A5010 can easily be deployed in space constrained environments such as retail. With its superb aesthetics and compact design, the A5010 antenna blends well into the retail back drop.



Warehousing

The A5010 can be deployed in different warehouse shelves and environments. With its superb aesthetics and compact design, the A5010 antenna blends well into the variety of different techniques warehouses for different industries.



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.

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

NEW ZEALAND
P: +64 4 974 6566

USA/CANADA
P: +1 408 769 5025

E: sales@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.

Times-7, and the stylized T-7 Antennas logo are trademarks or registered trademarks of Times-7 Research Ltd. All other trademarks are the property of their respective owners.

© 2022 Times-7 Research Ltd. All rights reserved. Specifications are subject to change without notice.
Datasheet v4.0