

#### ABOUT TIMES-7

Times-7 is a high-tech company specialising in the design and manufacture of RAIN (UHF) RFID antennas, based in Lower Hutt, New Zealand. We export all over the world either direct or through our distributor, authorized reseller and integrated solutions provider network. Our brand is well-established in the global RFID market, and we are known for high quality and reliability, as well as our significant RF expertise.

Founded in 2006, Times-7 has developed the largest portfolio of fixed RAIN RFID reader antennas. As well as standard antennas for all applications, Times-7 also offers a custom antenna development service, when the requirements are not fully satisfied by our catalogue antennas.

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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 SlimLine™ A5010

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.

### 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

\*View the A5010 antenna planes [here](#)

### Order Information

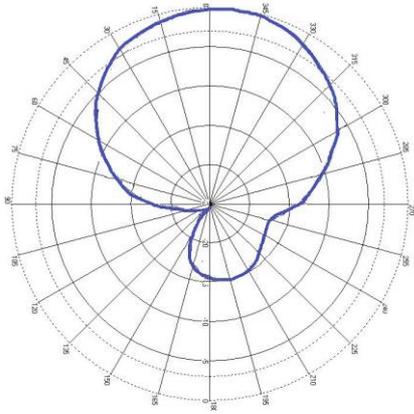
*(please quote both product code & part no.)*

*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

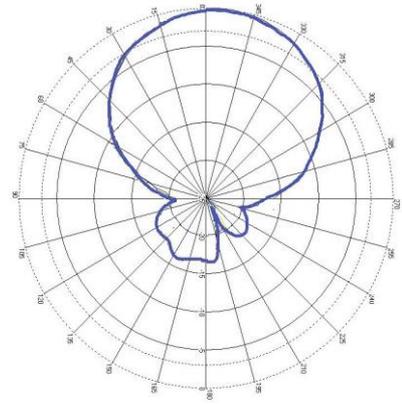
\*ROHS & CE compliant.

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

E-field Radiation Pattern

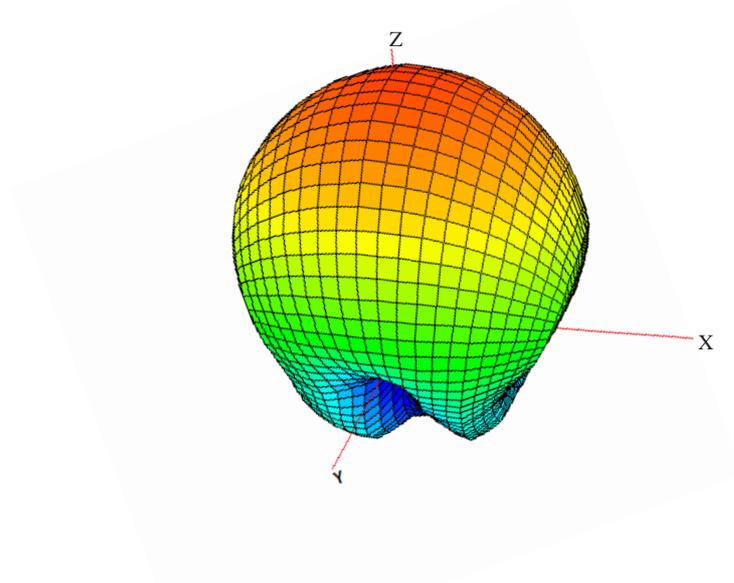


XZ-plane

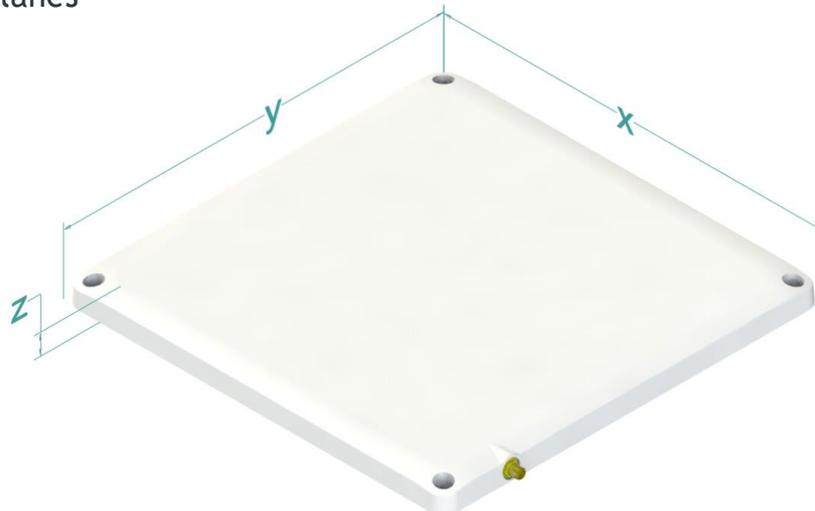


YZ-plane

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.

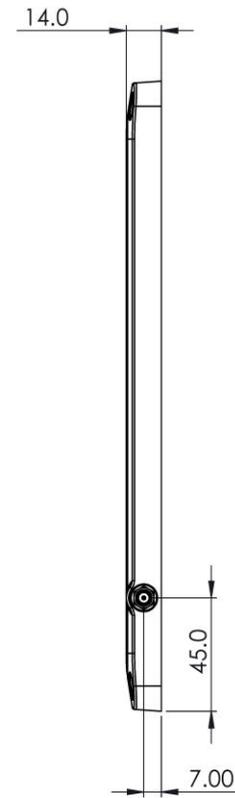
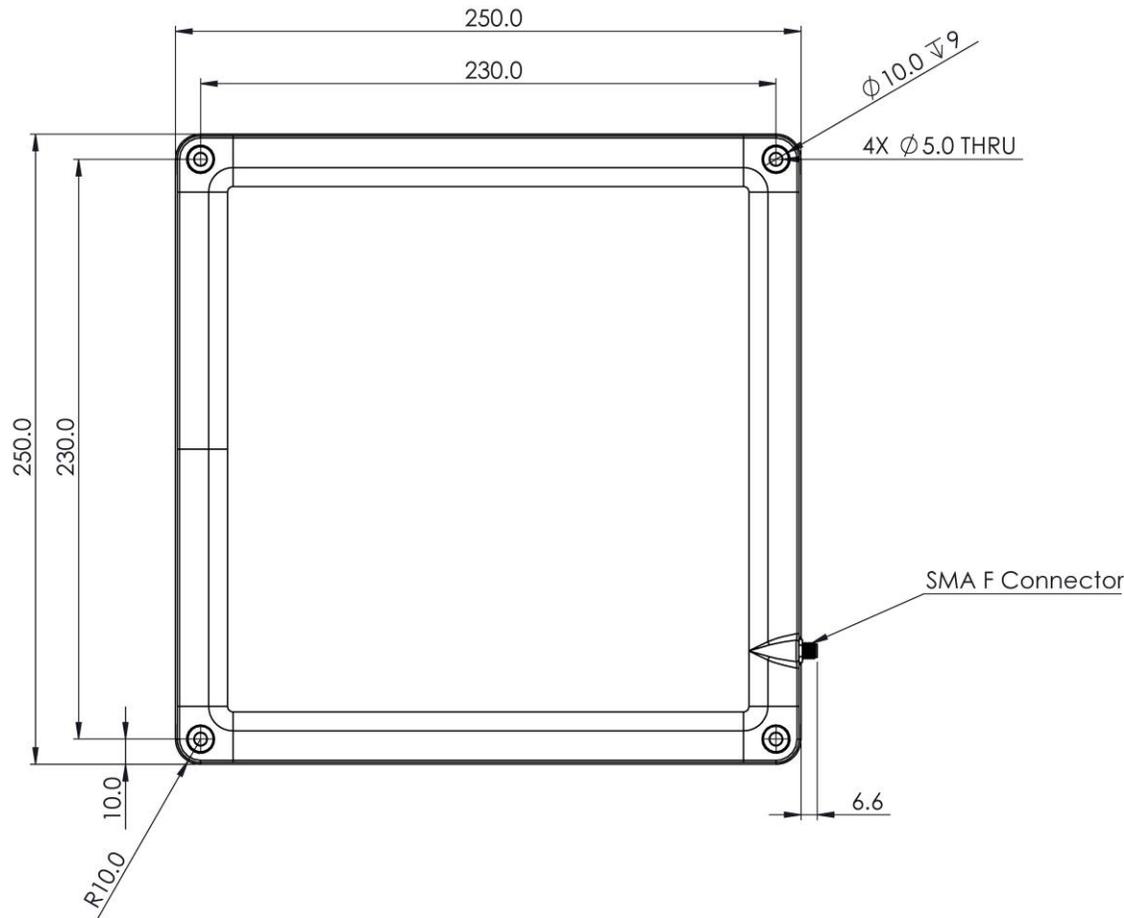


A5010 Stud mounted on a [VESA bracket](#) available from a wide range of suppliers.

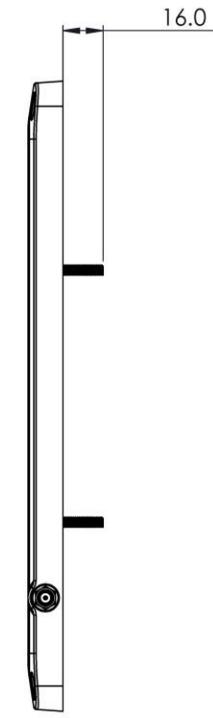
## Installation Instructions

- 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.

# Mechanical Drawing for the A5010 flush and stud



**Flush Mount**

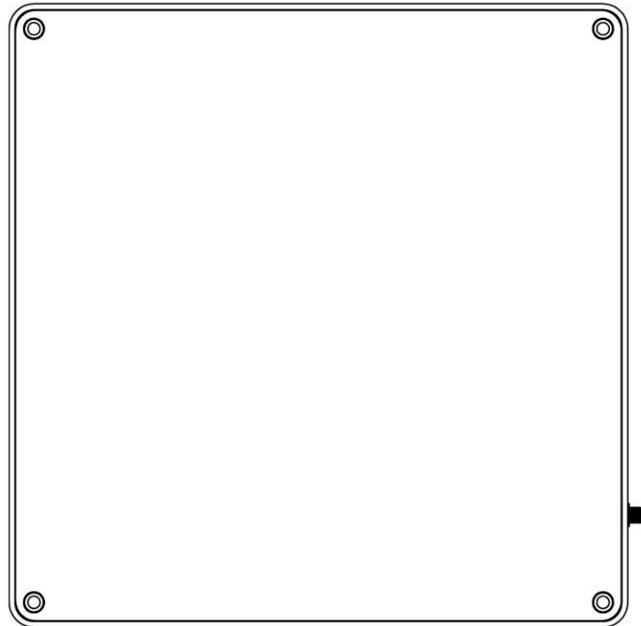


**Studded**

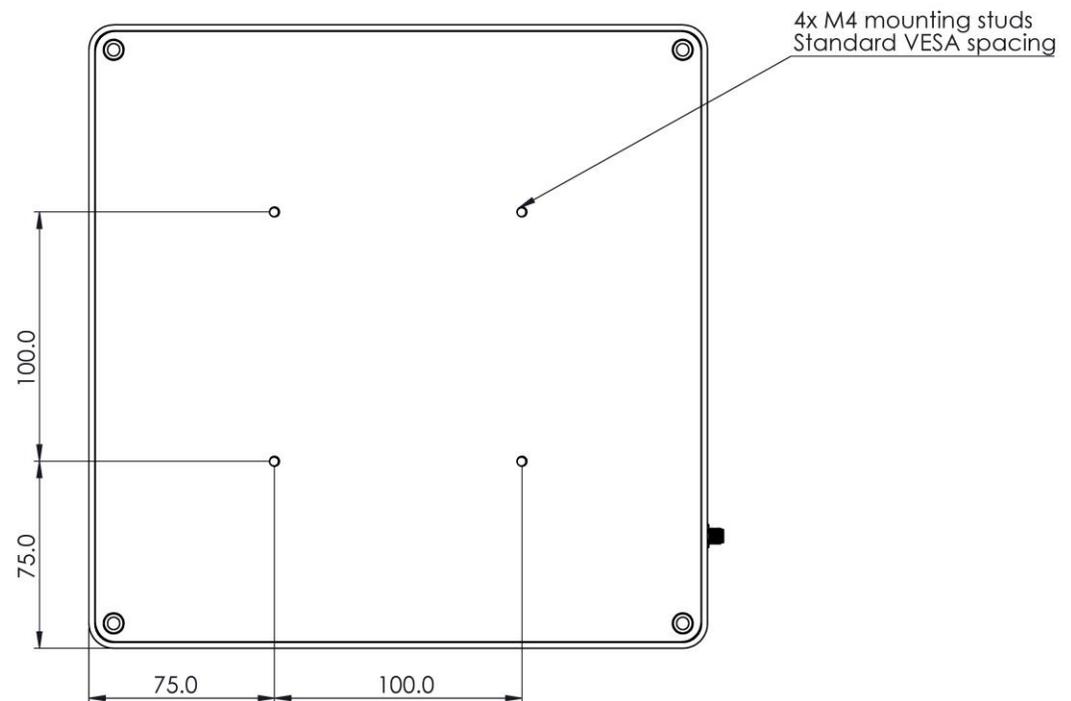
Description	Part Number
A5010 (Flush Mounted) FCC	60001
A5010 (Flush Mounted) ETSI	60002
A5010 (Studded) FCC	60003
A5010 (Studded) ETSI	60004

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			A5010 Antenna		
DRAWN R Lopez	SIGNATURE <i>[Signature]</i>	DATE 08/08/2019	SIZE <b>A3</b>	PART NO. Refer to Table	REV <b>B</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

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## Applications

### Medical & Pharmaceutical

The A5010 can operate at temperatures as low as 0°. High-value pharmaceutical assets can be tracked in fridges and freezers using the A5010 antenna. The slim design maximizes the usable space inside of 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.

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