

**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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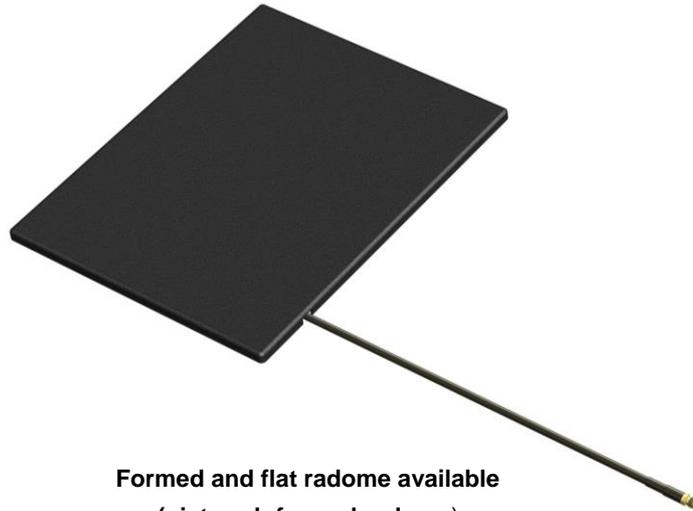
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**Formed and flat radome available  
(pictured: formed radome)**

As a member of our versatile SlimLine antenna range, the B6031 Circularly Polarized antenna is an ultra-low profile flat panel antenna designed for UHF RFID applications in customer-facing or space-conscious environments.

Boasting a generous 4m (13ft) read range, the B6031 shares similar dimensions and weight to a Tablet PC, effortlessly integrating into any office or retail setting.

**Order Information**

*Note: Please quote product code, band, cable type & part number*

Antenna Product Code	Band	Part No.
B6031	ETSI 865-868 MHz	75234
B6031	FCC 902-928 MHz	75235
Cable Accessories Product Code	Cable Type	Part No.
Cable 2 m, SMA to RPTNC	LMR 195 / 240 / 400	71436 / 71782 / 72042
Cable 4m, SMA to RPTNC	LMR 240 / 400	71784 / 72043
Cable 6m, SMA to RPTNC	LMR 240 / 400	71904 / 72044
Cable 8m, SMA to RPTNC	LMR 240 / 400	71788 / 72045
Mounting Accessories	Band	Part No.
Mounting Plate Product Code (A6031 / B6031)	ETSI and FCC	71631

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

## Physical and Environmental Specifications

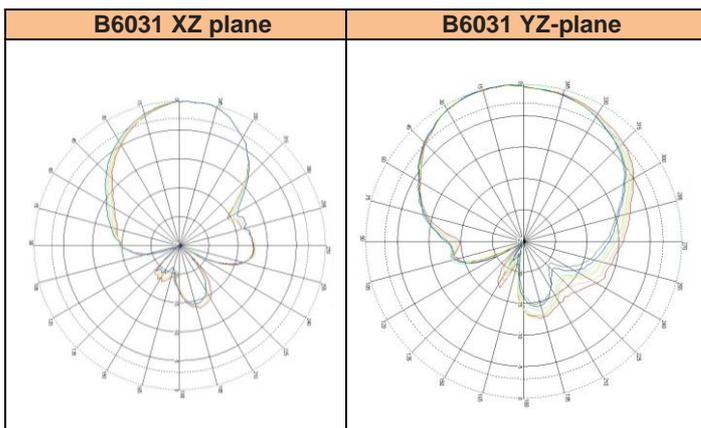
<b>Unboxed Dimensions:</b>	279 x 218 x 8.3mm
<b>*Length (x) x Width (y) x Depth (z)</b>	10.9 x 8.6 x 0.32 "
<b>Boxed Unit Dimensions:</b>	295 x 255 x 25mm
<b>(L x W x D)</b>	11.6 x 10 x 1"
<b>Net Weight:</b>	0.5kg / 1.1lbs
<b>Gross Weight</b>	0.65kg / 1.4lbs
<b>Radome Material:</b>	Fire retardant ABS
<b>Environmental Rating:</b>	IP54
<b>Operating / Storage Temperature:</b>	-20° to +55°C / -30° to +65°C -4° to +131°F / -22° to +149°F
<b>Mounting:</b>	Integrated mounting holes / Universal mounting brackets for rack (VESA) mounting are available
<b>Connector Cable type / position:</b>	SMA female 195 side fly lead (300mm / 1ft.)

## Electrical Specifications

<b>Frequency Range (ETSI/FCC):</b>	865 – 868 MHz / 902 – 928 MHz
<b>Polarization:</b>	RHCP (Right Hand Circular Polarized)
<b>Far-field Gain:</b>	5dBiC typical
<b>Far-field 3 dB beamwidth:</b>	60° xz-plane, 80° yz-plane
<b>VSWR:</b>	1.4 typical
<b>Front to back ratio:</b>	-15dB
<b>Axial ratio:</b>	2dB typical
<b>Nominal Impedance:</b>	50Ω
<b>Anti-static protection:</b>	Yes, DC grounded
<b>Antenna Detection:</b>	10K Ω resistance
<b>Maximum Input Power:</b>	3W

\*Far-field 3dB beam width in xz-plane is always along the longer side (L) of the antenna.

## Radiation Pattern



## Mounting Information

### Mounting Plate

The Times-7 Mounting Plate for the B6031 is designed to support VESA brackets. For exact dimension, please refer to the mechanical drawings on page 4. For instructions on how to attach the bracket to the antenna please click [here](#).

### Flush Mounting

The B6031 has 4 pre-drilled mounting holes on the rear side of the antenna, which can be drilled through without damaging the antenna. For the exact position please refer to the mechanical drawing on page 3. For further instructions please click [here](#).

## Installation Instructions

Ensure that only a firm finger tightness is used for the SMA connector. Use of tools to tighten the connector will apply excess force and likely damage the connector.

## Applications

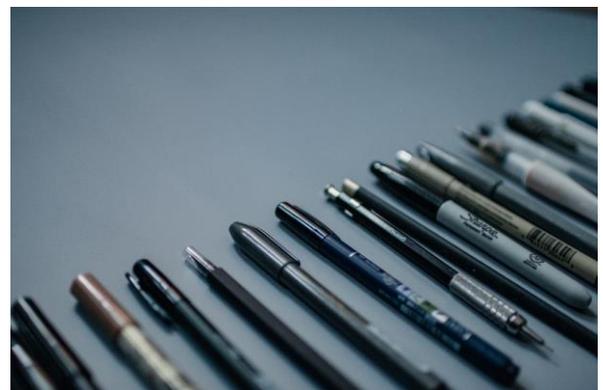
### Retail inventory management

The B6031 is a rugged antenna meaning it is ideal for asset tracking and encoding RFID tags. This antenna has a typical read range distance of 4m allowing manufacturers, wholesalers and retailers, for example, to track their inventory throughout the supply chain.



### Office asset tracking

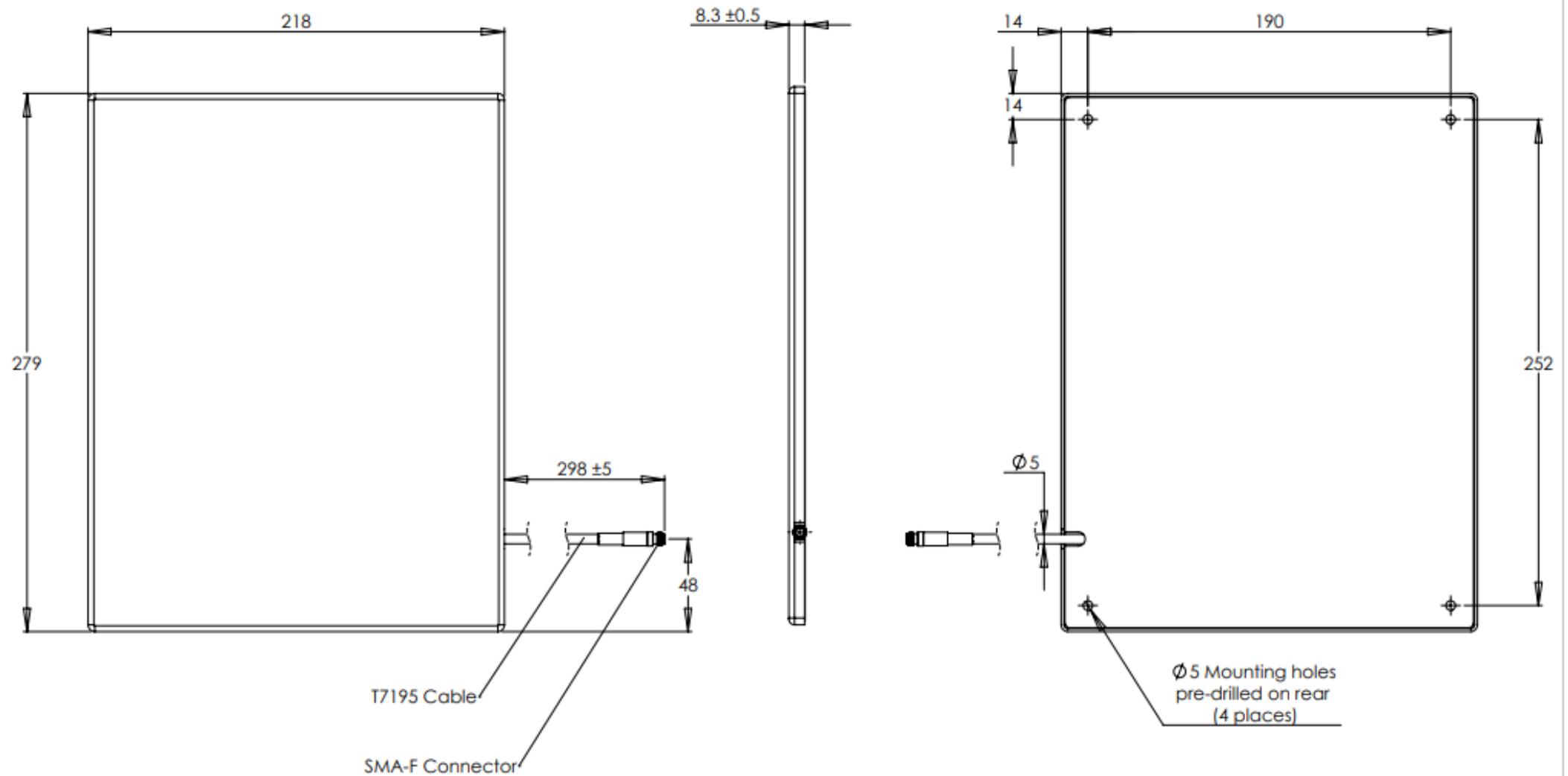
Unlock significant time savings by automating the receipt, tracking, and storage of office asset inventory. The B6031 empowers you to efficiently manage inventory across multiple locations and seamlessly transfer stock to meet your needs.



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.

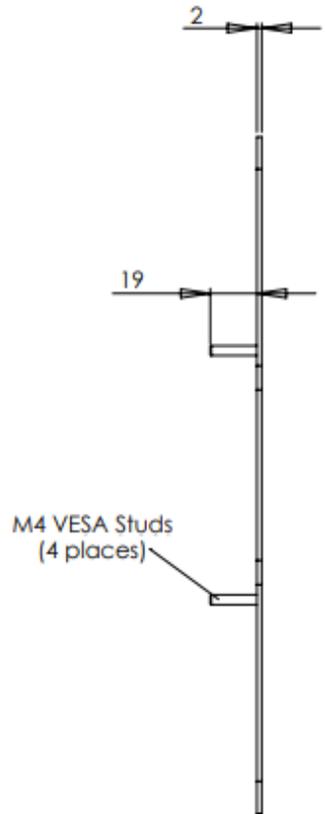
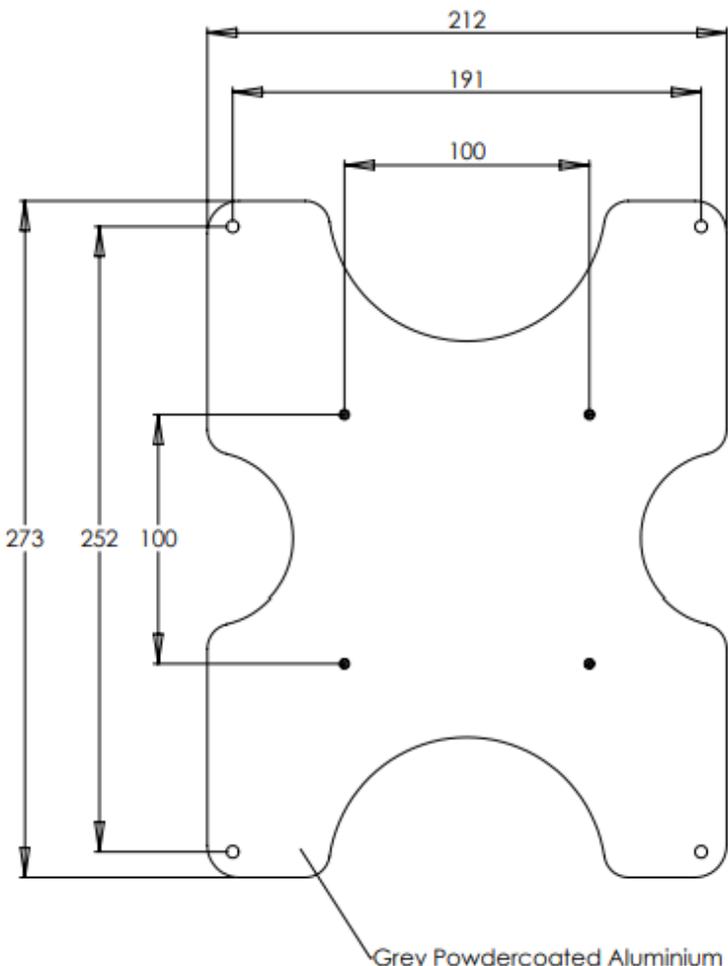
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# Mechanical Drawing for the B6031 Circularly Polarized Antenna (Formed Radome)



<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>		<b>DESCRIPTION</b> B6031 Antenna (Formed Radome)		
	DRAWN Maria Price		SIGNATURE	DATE 28-8-23	SIZE <b>A3</b>
APPROVED Peter Wilcock	SIGNATURE	DATE 28-8-23	DO NOT SCALE DRAWING		SHEET 1 OF 1

Mechanical Drawing for the B6031 Circularly Polarized Antenna Mounting Plate



<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		
			A6031 / B6031 Mounting Bracket		
DRAWN Maria Price	SIGNATURE	DATE 28-8-23	SIZE <b>A3</b>	PART NO. 71635-FGSM	REV <b>A</b>
APPROVED Peter Wilcock	SIGNATURE	DATE 28-8-23	DO NOT SCALE DRAWING		SHEET 1 OF 1