## 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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Patent Info: www.times-7.com/patents
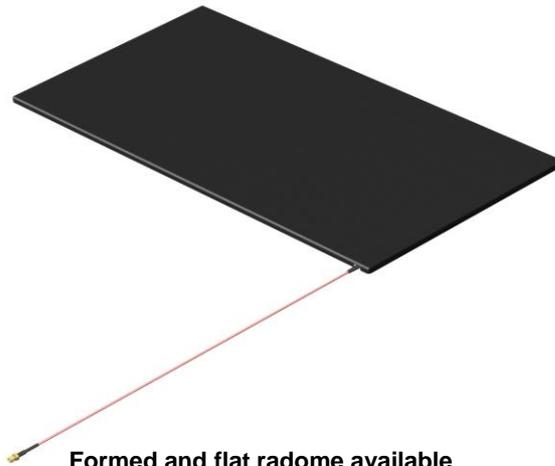
**Formed and flat radome available**
**(pictured: formed radome)**

The A1163 is the largest antenna in our True NearField Antenna Series and the largest near-field RFID antenna on the market, measuring 604 x 304 x 8.5mm. This antenna was designed to deal with difficult to read assets, such as liquids or metals, much like the other antennas in this series.

Our True NearField antennas excel in applications demanding precise "near zone only" tag detection. The A1163 guarantees dependable tag reads within an ultra-constrained zone by minimizing far-field components and eliminating surface dead spots. Its expansive footprint simplifies installation, reducing costs and complexity requiring fewer readers and cables.

Mounting the A1163 is effortless, thanks to integrated rear-side mounting holes for secure installation with screws. Alternatively, you could choose to use the provided self-adhesive rubber feet kit to prevent antenna slippage.

## Ordering Information

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

| *Antenna Product Code | Band | Part Number |
|---|---|---|
| A1163 Black | ETSI 865-868 MHz | 75248 |
| A1163 Black | FCC 902-928 MHz | 75250 |
| A1163 White | ETSI 865-868 MHz | 75249 |
| A1163 White | FCC 902-928 MHz | 75251 |
| *Mounting Accessories Product Code | Band | Part Number |
| Mounting Plate (A1163) | N/A | 72095 |
| *Cable Accessories Product Code | Cable Type | Part Number |
| 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 |

*RoHS & CE compliant.

View the Times-7 Cable Accessory datasheet here.

## Physical / Environmental Specifications

| | |
|---|---|
| **Unboxed Dimensions:** <br> **\*Length (x) x Width (y) x Depth (z)** | 604 x 304 x 8.5mm <br> 23.77 x11.96 x 0.33" |
| **Boxed Unit Dimensions:** <br> **(L x W x D)** | 620 x 335 x 30mm <br> 24.40 x 13.18 x 1.18" |
| **Weight:** | Net: 1.175kg / 2.59lbs. <br> Gross: 1.491kg / 3.29lbs. |
| **Radome Material:** | Flame retardant ABS |
| **Environmental Rating:** | IP54 |
| **Operating / Storage Temperature:** | 0° to +50°C / -30° to +50°C <br> +32° to +122°F / -22° to +122°F |
| **Mounting:** | Integrated mounting holes <br> Optional rubber feet included (20 x 20 x 1.45mm) |
| **Connector Type:** | SMA female fly lead |
| **Cable Type / Length:** | RG316 cable / 482mm / 19" |

## Electrical Specifications

| | |
|---|---|
| **Frequency Range:** | 865-867 MHz (ETSI) / 902-928 MHz (FCC) |
| **Polarization:** | Near-field |
| **VSWR:** | 1.95 typical |
| **Nominal Impedance:** | 50Ω |
| **Anti-static Protection:** | Yes, DC Grounded |
| **Antenna Detection:** | 10KΩ Resistance |
| **Maximum Input Power:** | 3W |

## Azimuth Planes
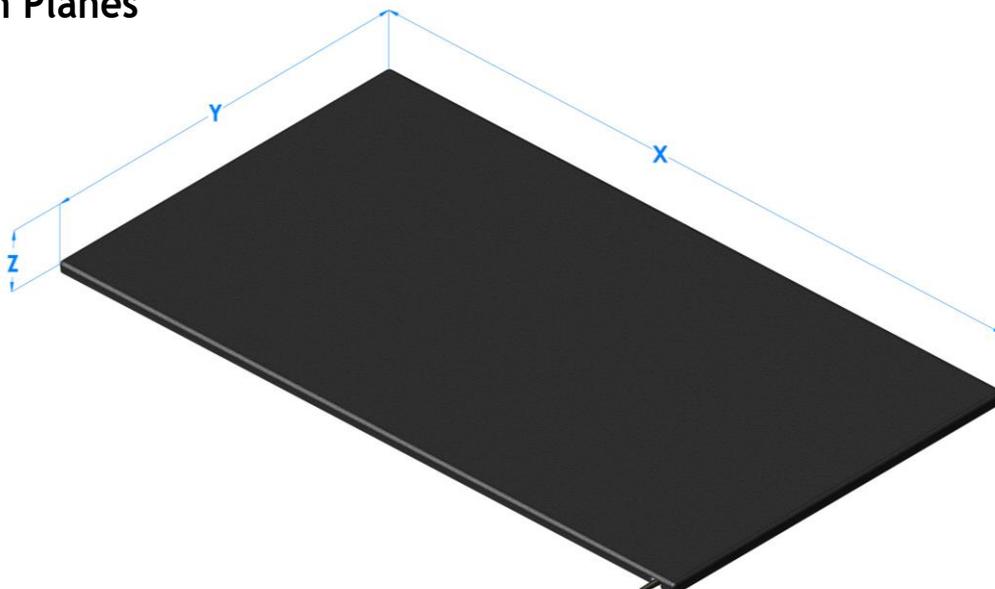
# Applications

## Point of Sale (POS)

Employing a near-field antenna in POS systems offers an effective means of expediting the identification process at the checkout counter. With an NF antenna, all appropriately tagged items placed on the antenna can be instantly and accurately identified, while mitigating the risk of stray reads from passing items.



## Metal and Liquids

Designed for applications dealing with metals or liquids, this antenna is an optimal choice. Its near-field energy remains unaffected by the potential side effects of these challenging materials, ensuring a consistent read range and reliable tag reads.



## Shelving

Near-field antennas used in shelving applications offer a close read range, enabling the tracking of items on each shelf without picking up stray signals from nearby shelves or passing items. This results in a more precise and focused read area, providing visibility over the specific items you aim to track.

## Mounting Information

Secure the antenna on flat surfaces either by using mounting screws or opting for a VESA mounting plate tailored for the True NearField Antenna Series. Discreetly positioned on the rear side, the mounting holes won't compromise performance when drilled through. For detailed instructions, check out our mounting guide.

If drilling is not an option, each antenna comes with a self-adhesive rubber feet kit. Simply attach these to the integrated mounting holes to prevent slippage.

**Integrated Mounting Holes**
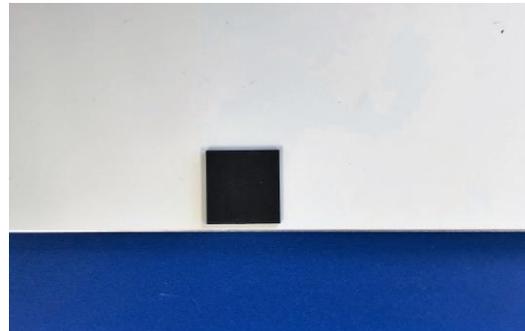
**Self-Adhesive Rubber Feet**

## 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 excessive pulling force on the cable and be mindful of its bend radius to prevent damage and ensure proper functioning.

View the Times-7 Cable Accessory datasheet here.

For additional information such as RoHS, CE, REACH or CAD models please contact us at sales@times-7.com.

# Mechanical Drawing for the A1163 True NearField Antenna (Formed Radome)

**TIMES-7**
INTELLIGENT TRACKING | SMART TECHNOLOGY



R3.5

604

304

Cable Grommet

482 ±5

RG316 Cable

SMA-F Connector

18

8.6 ±0.5

Ø2.5

7

590

7

295

290

Ø4 Mounting holes
pre-drilled on rear
(6 places)
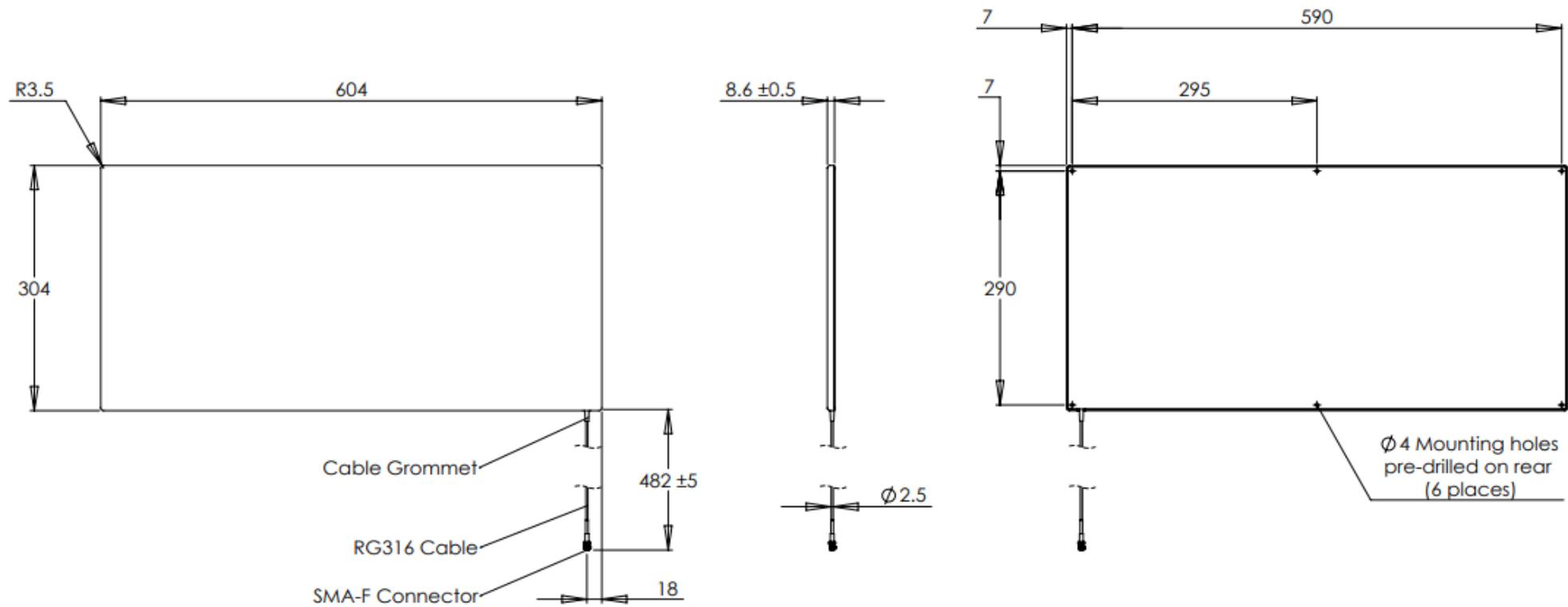
| Part No. | Description |
|----------|-------------|
| 75248 | A1163 True NearField Antenna (Formed Radome) ETSI - BLACK |
| 75250 | A1163 True NearField Antenna (Formed Radome) FCC - BLACK |
| 75249 | A1163 True NearField Antenna (Formed Radome) ETSI - WHITE |
| 75251 | A1163 True NearField Antenna (Formed Radome) FCC - WHITE |

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.

DIMENSIONS ARE IN mm
UNLESS OTHERWISE SPECIFIED
TOLERANCES:
NO DECIMAL PLACES ± 1
ONE PLACE DECIMAL ± 0.8

| | |
|---|---|
| DRAWN BY: Maria Price | DATE: 26-10-23 |
| APPROVED BY: Peter Wilcock | DATE: 26-10-23 |

DESCRIPTION
A1163 True NearField Antenna
(Formed Radome)

SIZE: A3
PART NO.: Refer to table
REV: A

DO NOT SCALE DRAWING
SHEET 1 OF 1

**TIMES-7**
INTELLIGENT TRACKING | SMART TECHNOLOGY



600

R2.5

300

Cable Grommet

482 ±5

RG316 Cable

SMA-F Connector

16

8.6 ±0.5

Ø2.5

5

590

5

295

290

Ø4 Mounting holes
pre-drilled on rear
(6 places)

| Part No. | Description |
|---|---|
| 72031 | A1163 True NearField Antenna (Flat Radome) ETSI - BLACK |
| 72032 | A1163 True NearField Antenna (Flat Radome) FCC - BLACK |
| 72033 | A1163 True NearField Antenna (Flat Radome) ETSI - WHITE |
| 72034 | A1163 True NearField Antenna (Flat Radome) FCC - WHITE |

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DIMENSIONS ARE IN mm
UNLESS OTHERWISE SPECIFIED
TOLERANCES:
NO DECIMAL PLACES ± 1
ONE PLACE DECIMAL ± 0.8

| DESCRIPTION | |
|---|---|
| A1163 True NearField Antenna (Flat Radome) | |
| DRAWN BY: Maria Price | DATE: 26-10-23 |
| | SIZE A3 | PART NO. Refer to table | REV A |
| APPROVED BY: Peter Wilcock | DATE: 26-10-23 |
| | DO NOT SCALE DRAWING | SHEET 1 OF 1 |

# Mechanical Drawing for the A1163 Mounting Plate



599

590

100

19

2

299    290    100

M4 VESA Studs
(4 places)
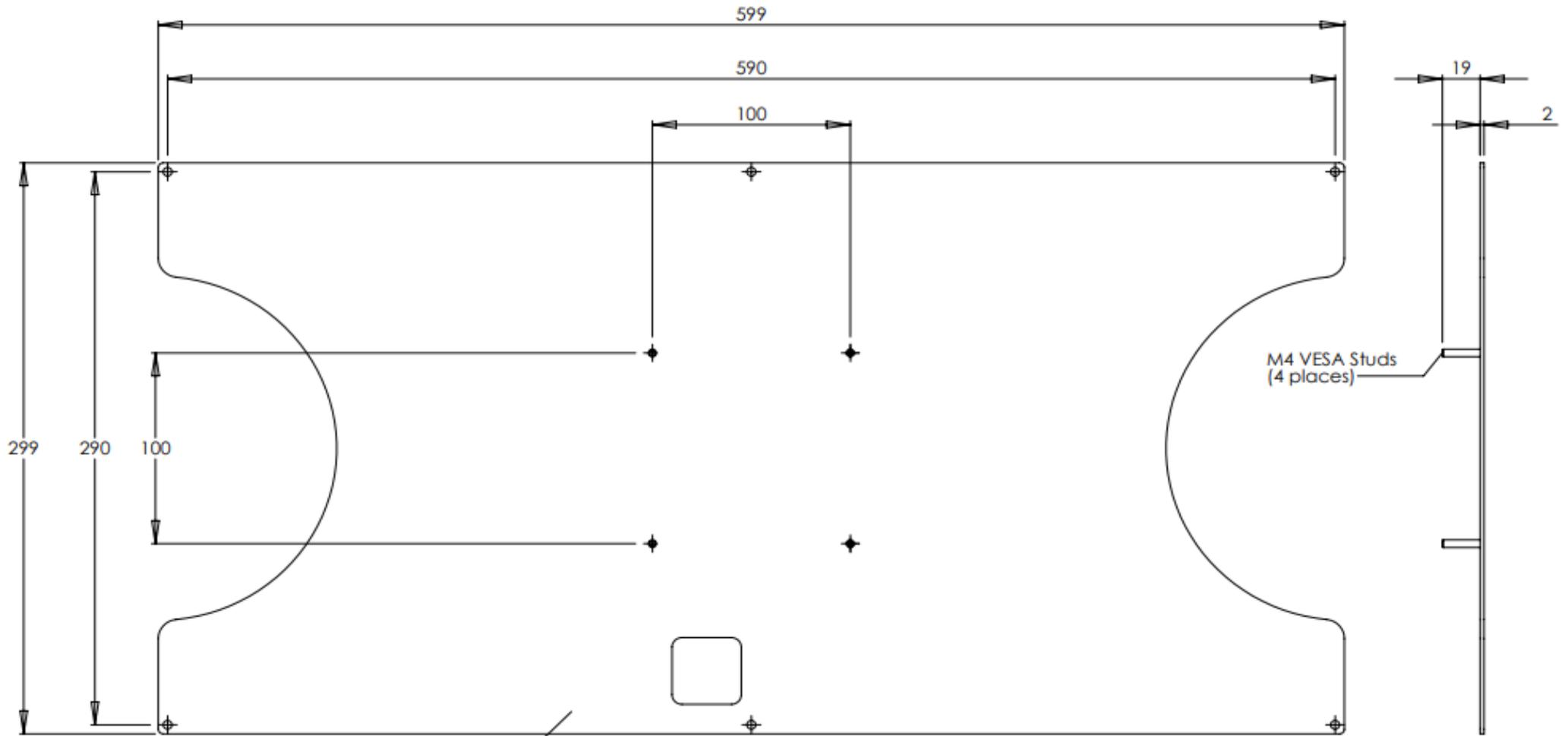
White Powdercoated Aluminium

DIMENSIONS ARE IN mm

UNLESS OTHERWISE SPECIFIED TOLERANCES:
NO DECIMAL PLACES ± 1
ONE PLACE DECIMAL ± 0.8

| DESCRIPTION | | | |
|---|---|---|---|
| A5060 / A1163 Mounting Plate | | | |
| DRAWN BY :<br>Maria Price | DATE :<br>26-10-23 | | |
| APPROVED BY :<br>Peter Wilcock | DATE :<br>26-10-23 | SIZE **A3** | PART NO.<br>72095 | REV<br>**A** |

DO NOT SCALE DRAWING    SHEET 1 OF 1