

TRUE RAIN NEARFIELD[™] ANTENNA FAMILY A1115, A1130, A1163

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.

Times-7 Research Ltd 29 Railway Avenue Lower Hutt 5010 New Zealand

NEW ZEALAND P: +64 4 974 6566

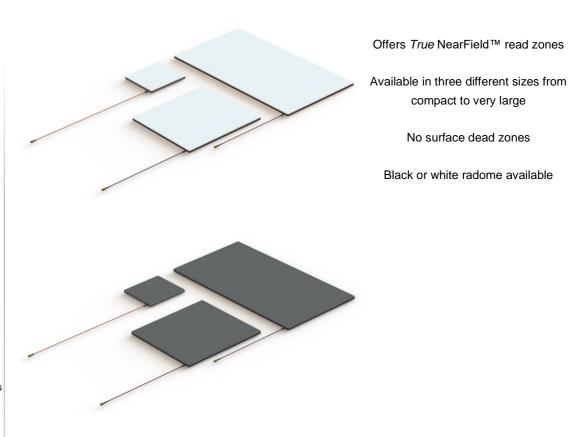
USA/CANADA P: +1 408 769 5025

E: sales@times-7.com

www.times-7.com







A1115, A1130 and A1163 True NearField™ antennas available in black and white.

The new *True* NearField[™] Antenna Series is explicitly designed for applications, which require "near zone only" tag detection or involve metals, liquid and other challenging materials that are hard to be detected by a far-field antenna. With radiative near-field components and no surface dead spots, the Times-7 *True* NearField[™] antennas provide reliable tag reads within a very constricted read zone.

Thanks to the unique antenna design the *True* NearFieldTM antenna series offers three dimensions. From a compact 150 x 150 mm to a large 300 x 600 mm footprint. Furthermore, they are available in black or white.

All three antennas provide integrated mounting holes on the rear side, which can be drilled through for using mounting screws. In addition, each antenna is provided with an optional self-adhesive rubber feet kit to stop the antenna from slipping.



TRUE RAIN NEARFIELD[™] ANTENNA FAMILY A1115, A1130, A1163

Specifications

Physical / Environmental Specifications

| | A1115 | A1130 | A1163 |
|------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------|------------------------------------------------------|
| Dimensions: | 150 mm x 150 mm x 8.6 mm | 300 mm x 300 mm x 8.6 mm | 600 mm x 300mm x 8.6mm |
| Length (x) x Width (y) x Depth (z) | 5.90" x 5.90" x 0.34" | 11.81" x 11.81" x 0.34" | 23.62" x11.81" x 0.34" |
| Unit Boxed Dimensions: (L x W x D) | 285 mm x 235 mm x 15 mm | 335 mm x 315 mm x 35 mm | 620 mm x 335 mm x 30 mm |
| | 11.22" x 9.25" x 0.59" | 13.18" x 12.40" x 1.37" | 24.40" x 13.18" x 1.18" |
| Weight: | Net: 0.154kg / 0.34 lbs. Gross: 0.183 kg / 0.41 lbs. | Net: 0.58 kg / 1.27 lbs. Gross: 0.784 kg / 1.72 lbs. | Net: 1.175kg / 2.59 lbs. Gross: 1.491 kg / 3.29 lbs. |
| Radome Material: | Fire retardant ABS (available in black and white, see order information) | | |
| Environmental Rating: | IP54 | | |
| Operating Temperature: | 0° to +50°C / -30° to +50°C | | |
| Storage Temperature: | +32° to +122°F / -22° to +122°F | | |
| Mounting: | Integrated mounting holes on the backside of the antenna (refer to mechanical drawings) / Optional rubber feet included (20 x 20 x 1.45 mm) | | |
| Connector and cable type: | SMA female side fly lead (482mm, 19" / RG316 cable) | | |

Electrical Specifications

| | A1115 | A1130 | A1163 |
|------------------------|--------------------------|-------|-------|
| Frequency Range: | 865-867 MHz, 902-928 MHz | | |
| VSWR | 1.95 typical | | |
| Nominal Impedance: | 50 Ω | | |
| Maximum Input Power: | 3 W | | |
| Antenna Detection | 10K Ω Resistance | | |
| Anti-static protection | Yes, DC Grounded | | |

View antenna planes for A1115, A1130 & A1163 here



Ordering Information

| (please quote both product code, band/cable type & part no.) | | | | |
|--------------------------------------------------------------|--------------------|----------|----------|--|
| *Antenna Product Code | Band | Part No. | Part No. | |
| | | BLACK | WHITE | |
| A1115 | ETSI 865-867 MHz | 72027 | 72029 | |
| A1115 | FCC 902-928 MHz | 72028 | 72030 | |
| A1130 | ETSI 865-867 MHz | 72022 | 72025 | |
| A1130 | FCC 902-928 MHz | 72023 | 72026 | |
| A1163 | ETSI 865-867 MHz | 72031 | 72033 | |
| A1163 | FCC 902-928 MHz | 72032 | 72034 | |
| Cable Accessories Product | Cable Type | Part No. | | |
| Code | | | | |
| Cable 2 m, SMA to RPTNC | T7 195 / 240 / 400 | 71436 / | N/A | |
| | | 71782 / | | |
| | | 72042 | | |
| Cable 4 m, SMA to RPTNC | T7 240/400 | 71784 / | N/A | |
| | | 72043 | | |
| Cable 6 m, SMA to RPTNC | T7 240/400 | 71904 / | N/A | |
| | | 72044 | | |
| Cable 8 m, SMA to RPTNC | T7 240/400 | 71788 / | N/A | |
| | | 72045 | | |

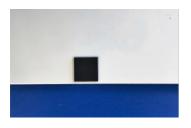
*Built in New Zealand. ROHS & CE compliant.

View the Times-7 Cable Accessory datasheet here

Mounting Information



Integrated mounting hole.



Self-adhesive rubber feet.

All models of the *True*-NearField[™] antenna series can be flush mounted on flat surfaces using mounting screws or VESA mounted using the mounting plates designed for the NearField[™] Antenna Series. Each antenna provides mounting holes, which are only visible on the rear side of the antenna. Please refer to the mechanical drawings for the exact position. These holes can be drilled through without damaging the product or interfering with the performance. For further assistance please go to our <u>mounting guide</u>.

If drilling through the surface of the antenna is not an option, each antenna is provided with a self-adhesive rubber feet kit. These can be attached over the integrated mounting holes to stop the antenna from slipping.

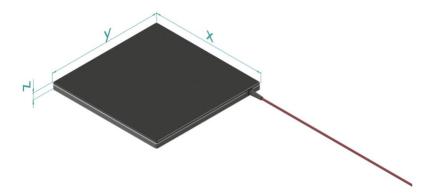
Installation Instructions

- 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.

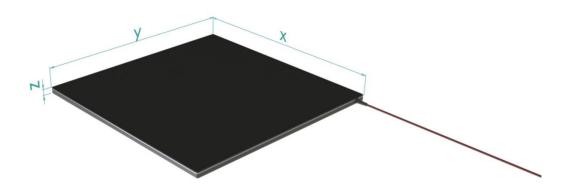


TRUE RAIN NEARFIELD[™] ANTENNA FAMILY A1115, A1130, A1163

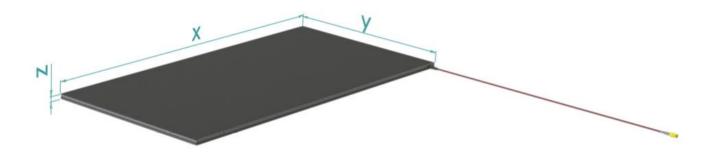
Antenna Planes - A1115



Antenna Planes - A1130

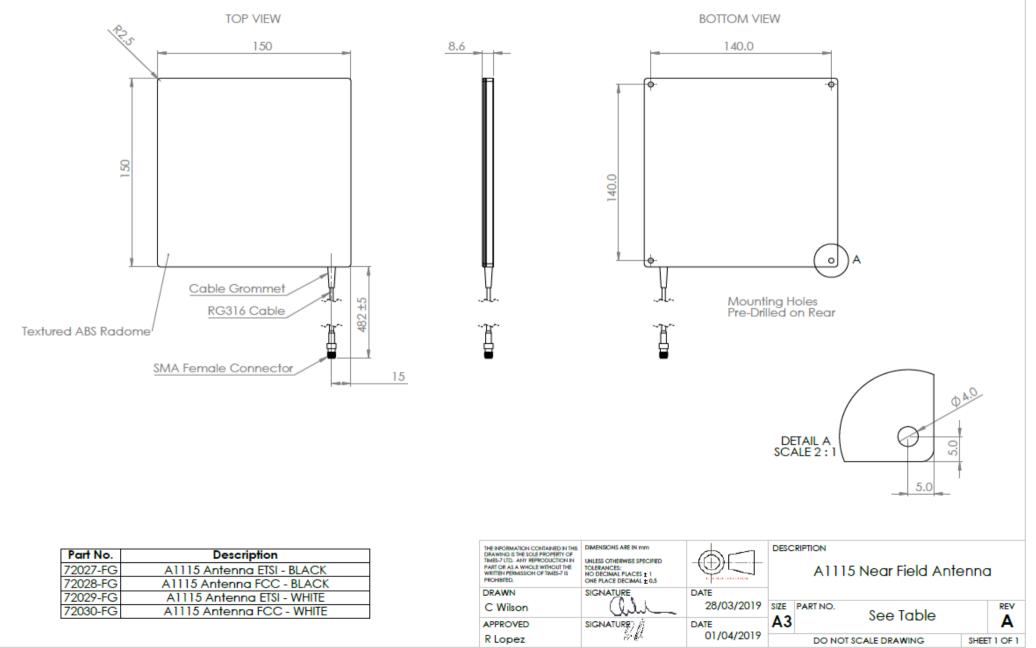


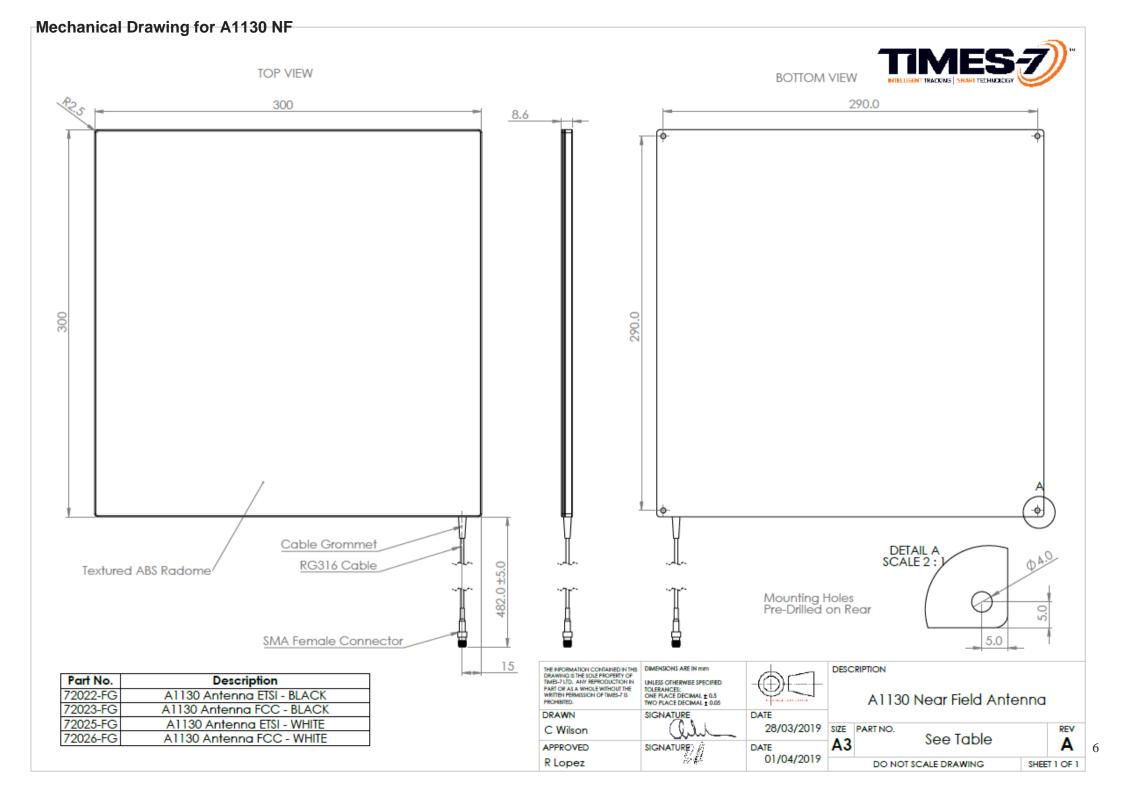
Antenna Planes - A1163



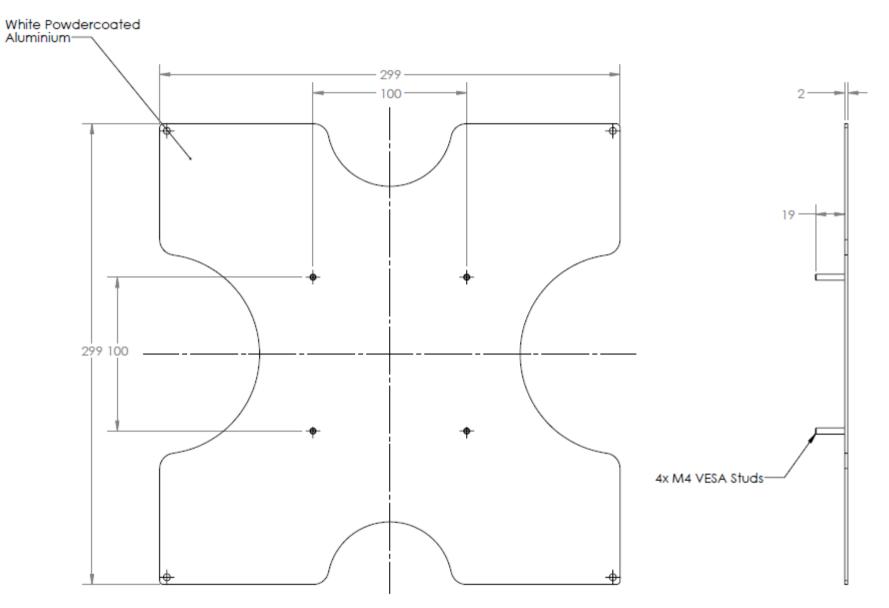
Mechanical Drawing for A1115 NF

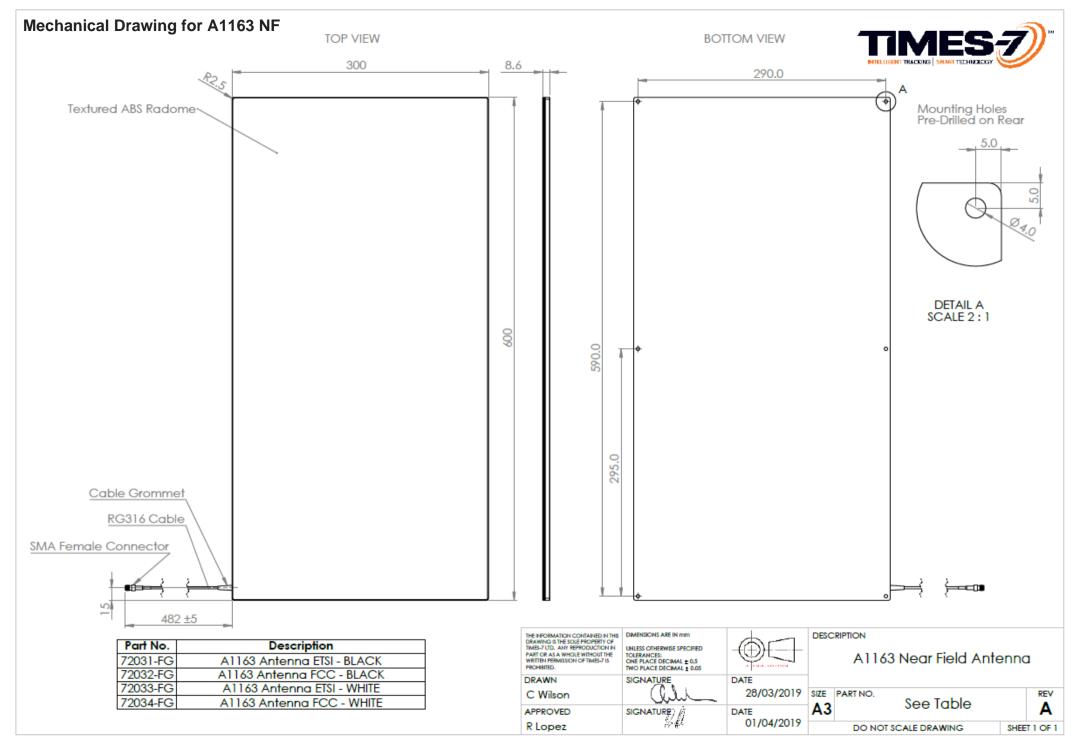




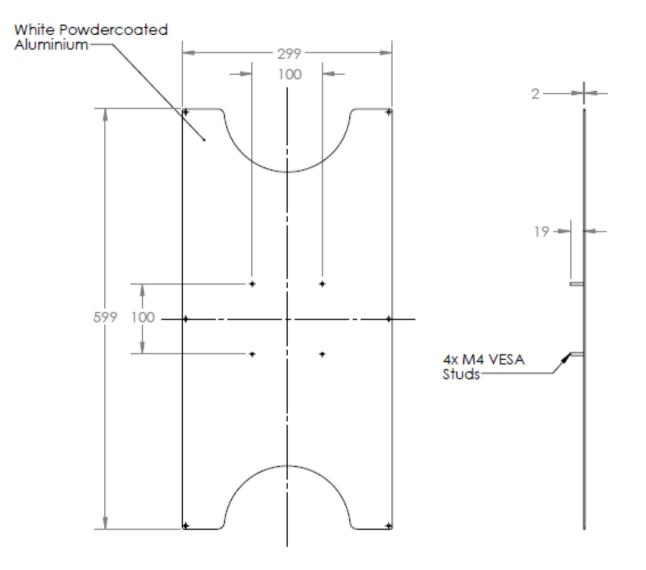












9



FRUE RAIN NEARFIELD™ ANTENNA FAMILY A1115, A1130, A1163

Applications



Metal and liquids

True NearField[™] antennas are ideal for applications which involve metal or liquids. Using their near-field energy only they are not affected by the side effects of these challenging materials and provide consistent read ranges and reliable tag reads.

POS



Using a near-field antenna for POS systems is a great way to reduce the time identifying each item at the check-out counter. An NF antenna can instantly and correctly identify all items that are placed on the antenna so long as the items are tagged appropriately while avoiding stray reads by passing items.

| HILL I | A DESCRIPTION OF THE OWNER OWNER OF THE OWNER OWNER OF THE OWNER |
|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | T/M I M HI HI WALL |
| YS I | THERE AND A |
| A T | A REPORTED AND A REPORT |
| | THIS AND A |

Shelving

The proximity read range of near field antennas used in shelving applications allows for tracking items on each individual shelf avoiding stray reads in adjacent shelves or items which are passing by. This allows for a more defined and focused read area, in which you gain visibility over the items that you want to track.

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 29 Railway Avenue Lower Hutt 5010 New Zealand

> > NEW ZEALAND P: +64 4 974 6566

NORTH AMERICA 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. © 2020 Times-7 Research Ltd. All rights reserved. Specifications are subject to change without notice. Datasheet v2.0