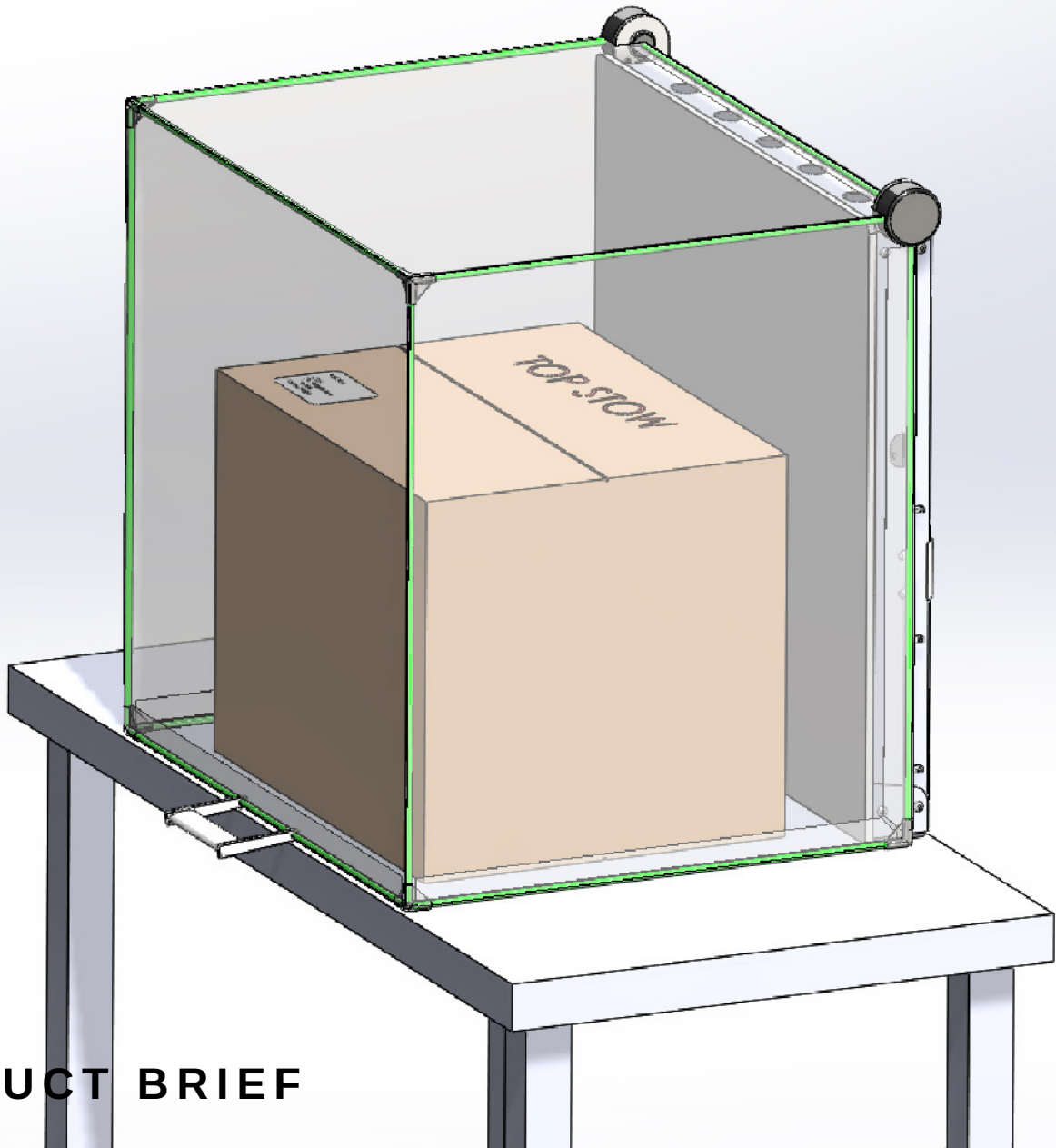




veRFIDa![®]

Reliable reads, trusted results.[™]



PRODUCT OVERVIEW

veRFIDa! is a powerful, but compact Packing Station offering fast and reliable tag reads of packages with high tag density.

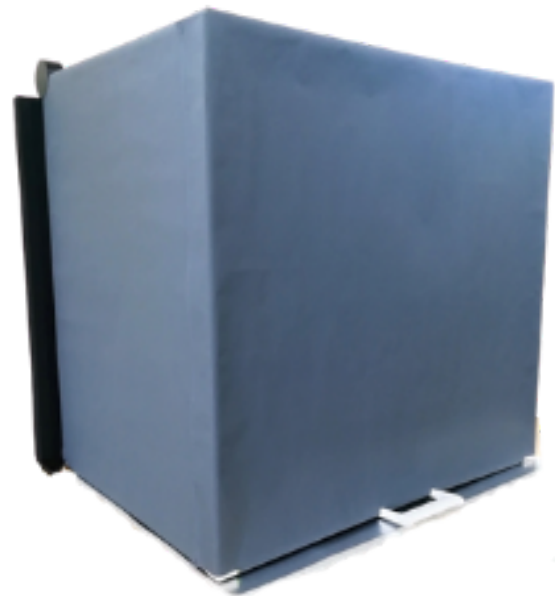
veRFIDa! has gone through meticulous in-house testing conducted by Times-7's highly-qualified engineers.

Proven Read Performance:

This product consistently read 500 tags in a densely tagged box, 500 times during testing with 100% read accuracy.

Proven Speed Performance:

This product can read up to 1000 tags per second.



THE BENEFITS

Designed for packing and shipment verification in e-commerce businesses across all industries

- ✓ **Lightweight:** Weighs approx. 10 kg
- ✓ **Low cost:** A fraction of the cost of similar products
- ✓ **Ease-of-deployment:** Minimal labour required
- ✓ **Compact:** Much less real estate required, unlike a tunnel system
- ✓ **Reader compatibility:** The system can accommodate any four-port UHF RFID reader
- ✓ **Excellent RF performance:** Can read 1000 densely packed tags per second as well as sparsely packed liquid & metal assets.

THE BACKGROUND

As the e-commerce landscape is evolving, many organisations are creating agile, decentralised supply chains. Warehouses are becoming smaller relying increasingly on RAIN RFID systems for tracking and verification to meet the demands of same-day delivery or pick-up from a local store.

- Large RFID enabled distribution centres have traditionally used RFID tunnels to verify packed goods before they can be processed and shipped. These tunnels are expensive, consume a lot of real estate and require more technical resources to be set-up. Making them unsuitable for smaller warehouses and retail back offices.
- Alternative fixed reader solutions using single multi-patch antenna arrays are smaller and cheaper but struggle to achieve the performance of a tunnel using 4 high gain multi-patch array antennas in different orientations.

veRFIDa! delivers the benefits of both solutions and can read boxes with various densely tagged items.

PHYSICAL SPECS

Dimensions: Closed Position:
820mm x 550mm x 695mm (LxWxD)

Open Position:
820mm x 710mm x 1200mm

Weight of Hood:
650g / 1.4 lb. approx.

Lightweight: 10kg

Radome Material:
White coloured ABS plastic (flame retardant)

Environmental Rating:
IP54

Operating / Storage Temperature:
10°C to 40°C

Mounting:
To be mounted on a bench using the mounting bracket provided

Connector type / position:
4 accessory cables with RPTNC connector ready to be connected with an UHF RFID reader

Cable type/ length:
1m 195-type cable

ELECTRICAL SPECS

Frequency Range:

865-868 MHz (ETSI) / 902-928 MHz (FCC)

Polarisation:

Multi-linear polarization – Horizontal, Vertical and Slant

Far-field Gain:

7 dBi typical

Far-field 3dB beamwidth:

~65° in both planes with ~10° beam tilt and ~30° and ~40° in Azimuth and Elevation with ~15-20° beamtilts

VSWR:

1.8 typical

Front to back ratio:

15 dB typical

Nominal Impedance:

50 Ω

Anti-static protection:

Yes, DC grounded

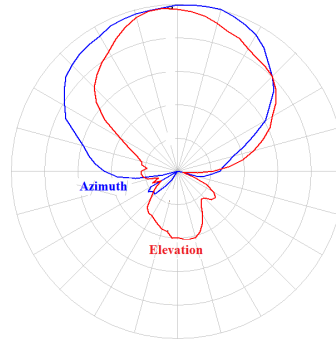
Antenna Detection:

10 K Ω resistance

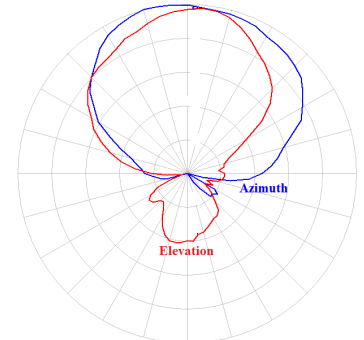
Reader Compatability:

All UHF RFID readers operating in 864-868 MHz or 902-928 MHz and has a R-TNC connector

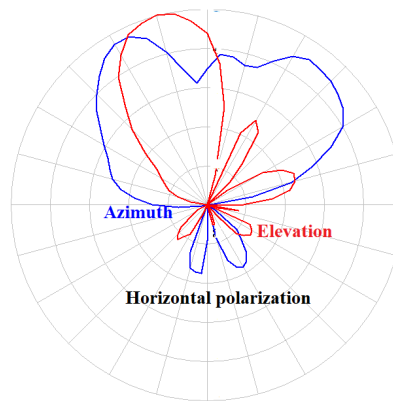
RADIATION PATTERN



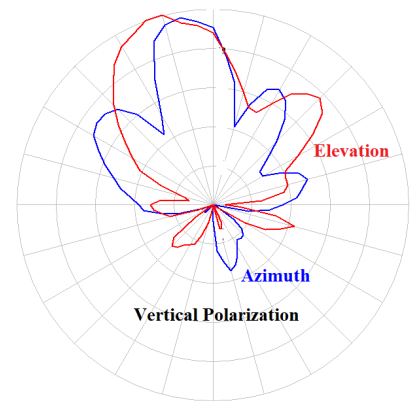
Vertically polarised conical beam with 10° azimuth tilt in the north and 10° elevation tilt in west direction



Horizontally polarised conical beam with 10° azimuth tilt in the south and 10° elevation tilt in the east direction

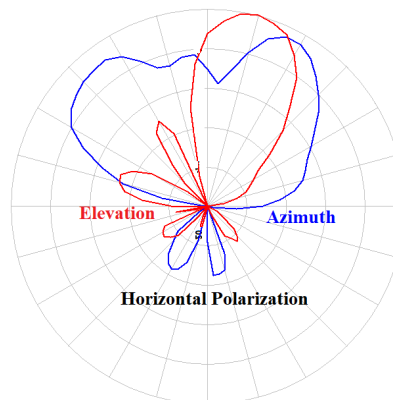


(a)

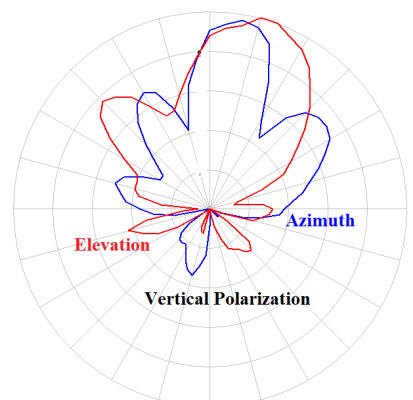


(b)

Multilinearly polarised broadside directional beam with ~15° azimuth beam tilt in the north-west and ~20° elevation tilt in the north direction



(a)



(b)

Multi-linearly polarised broadside directional beam with ~15° azimuth beam tilt in the south-east and ~20° elevation tilt in the south direction