INSTALLATION MANUAL

TRONRFID INTEGRATED RFID PORTALS



INTRODUCTION

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01 INTRODUCTION

Thank you for choosing TronRFID Integrated RFID Portal. This system is a high-performance, UHF (Ultra-High Frequency) RFID solution designed for tracking tagged items, assets, or personnel as they pass through a defined entryway or corridor.

It consists of two antenna panels and a RFID Reader unit that identifies RFID tags and communicates the data to a host software system.

02 INCLUDED HARDWARE

| ITEM NO. | DESCRIPTION | QTY |
|----------|--|-----|
| 1 | Floor Mounting Base Plate | 02 |
| 2 | Master Panel (Pre fitted with Antenna) | 01 |
| 3 | Slave Panel (Pre fitted with Antenna) | 01 |
| 4 | RFID Reader | 01 |
| 5 | Coaxial Antenna Cables (LMR-200) | 02 |
| 6 | Floor Mounting Bolt Kit | 01 |
| 7 | Ethernet Cable (3m / 10ft) | 01 |
| 8 | Installation Manual (This Document) | 01 |
| 9 | Allen Bolts Size M4 | 05 |
| 10 | Allen Bolts Size M5 | 05 |
| 11 | Allen Bolts Size M10 | 02 |
| 12 | Washers | 20 |



03 TOOLS & EQUIPMENT REQUIRED

(Not included in Hardware kit)

- Hammer Drill with Masonry Bit, Size 12mm (for concrete floors)
- Socket wrench 17mm
- Spanner / Wrench 7mm
- Allen Key M4

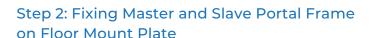
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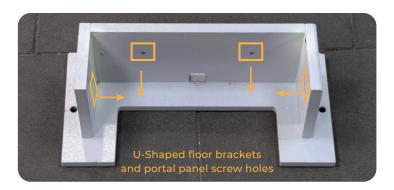
04 INSTALLATION PROCEDURE

Step 1: Fixing the Floor mount plate



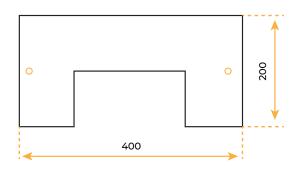
- 1.1 **Positioning:** Place the pedestals at the pre-planned locations.
- 1.2 **Marking:** Mark the drill holes through the base plates onto the floor





- 2.1 Place the master portal frame into the designated U-shaped area.
- 2.2 Ensure it rests snugly and level within the space, confirming no tilt or gaps.
- 2.3 Locate the pre-drilled openings on the Industrial Portal frame.
- 2.4 Align these holes precisely with the corresponding ones on the mounting frame.





- 1.3 **Drilling:** Move the pedestals aside. Using the hammer drill, drill 12mm holes to the depth 75-80mm.firmly with screws
- 1.4 **Securing:** Clean the debris from the holes and insert the anchor bolts. Reposition the pedestals and securely tighten the nuts with a socket wrench until the pedestals are firm and do not wobble.



- 2.5 Use standard M4 fasteners to securely affix the floor mount to the portal frame.
- 2.6 Check all screws for tightness and ensure there's no movement.
- 2.7 Confirm the portal panel sits evenly with clean alignment.

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Step 3: Reader Mounting in Master Pannel



3.1 There is dedicated mounting Location for a fixed reader inside the master portal

3.2 It has pre-drilled mounting holes

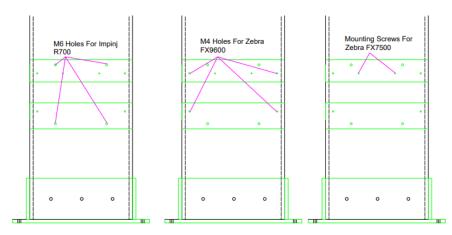
3.3 Align the reader with the holes and use screws to fasten it securely to the panel



Antenna mount points

3.4 Reader can also be mounted using VESA-compatible bracket (optional) on pre-drilled bracket mounting holes

Panels are provided with a pre-installed antenna. If there's ever an issue with the antenna, you'll have the option to replace them. Simply unscrew the fasteners and remove the antenna from the panel.



Step 4: Cabling and Connections

4.1 Connect coaxial cable (cable 01, 0.5m long) to the prefitted antenna in the Master Portal to the port labeled ANTI on the RFID Reader.

4.2 Connect the second coaxial cable from the stacked panel (if used) to the port labeled ANT2 on the RFID Reader.

4.3 Ensure the connectors are hand-tightened, then give a final 1/4 turn with a wrench. Do not over-tighten.

(IMPORTANT: Perform all cabling with the power supply disconnected.)

Network and Power Cable

- Connect one end of an Ethernet cable to your POE+ Network Switch port.
- Connect the other end to the LAN/POE port on the RFID RFID Reader. This single connection provides both the network link and all the power the unit



Coaxial port connection



Reader antenna interface

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Step 5: Front Cover Installation



- 5.1 Each master panel setup consists of one cover sheet
- 5.2 The sheet is installed by sliding it into position.
- 5.3 The sheets slide in smoothly without resistance.



5.4 No screws are needed—once in place, the sheets are held securely by the design of the slot or grooves.

CONTACT US FOR HELP OR MORE DETAILS

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