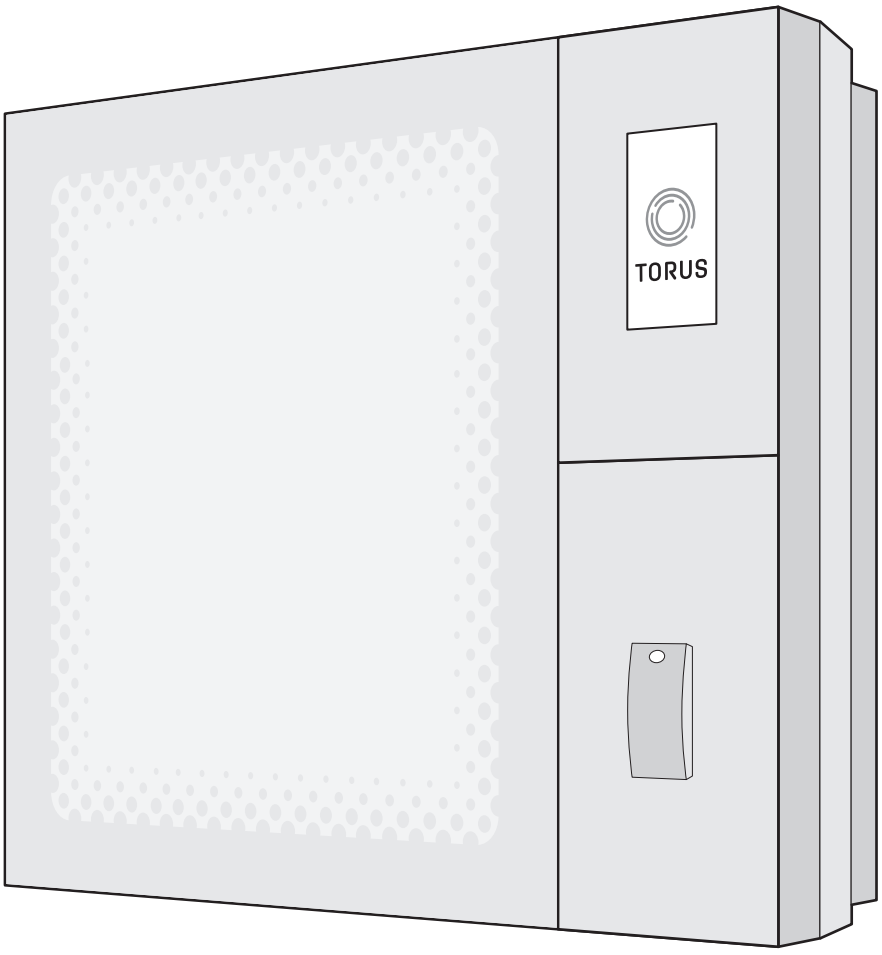
TORUS

Installation Guide



For assistance, please email the manufacturer at support@torus-technology.com

Diagram above is shown with optional reader attached.

2 PERSON LIFT

Contents

Safety & Warnings ..... Page 2

Before You Begin ..... Page 3

Package Contents ..... Page 4

Installation Instructions ..... Page 5

Adding a Card Reader or Other Device ..... Page 10

Safety and Warnings



POWER
Cabinet is an electronic device. It can be powered using 110-240V AC power or Power Over Ethernet (POE/POE+/POE++)



ENVIRONMENT
Cabinet is for interior use only. It must be installed on a wall capable of supporting its weight, with no direct exposure to sunlight or water.



TEMPERATURE
The operating temperature of the cabinets is between 0°C and 55°C (32°F - 130°F).



OTHER
Torus is an Internet of Things (IoT) solution which requires a subscription to the software and an internet connection for the cabinet.



DAMAGE / SCRATCHING
Damage to the cabinet caused by intentional misuse or failure to follow the instructions will not be covered under warranty.



WEIGHT
Each cabinet is heavy (see page 4). Correct lifting techniques and safe handling methods must be observed.



CLEANING
Wipe the surface of the door and touchscreen with a soft cloth. Use gentle cleaning solution or water as 'dry' cleaning may cause dust particles to scratch the surface. Never use abrasive or high alkaline cleaners.

Please read this Installation Guide carefully. If the cabinet is sold, this guide must be provided to to the buyer and/or installers. Under no circumstances does the manufacturer accept warranty or liability for damage caused by improper use or failing to follow these instructions.

Notices

This document contains information about products and services provided by CIC Technology. Every commercially reasonable effort has been taken to ensure the quality and accuracy of the information provided, however the content is for informational purposes only. The described product or process in this document is subject to change without prior notice, due to continuous development and improvement.

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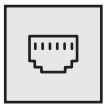
Before You Begin

Power



AC Power
110-240V

OR

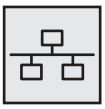


Power over Ethernet
POE / POE+ / POE++

The cabinet can be powered from a regaular power outlet or by using POE. Make sure the chosen option is ready and available before commencing installation.

The relevant ports should be within 2m / 6′ of the cabinet.

Connectivity



LAN
Local Area Network

OR

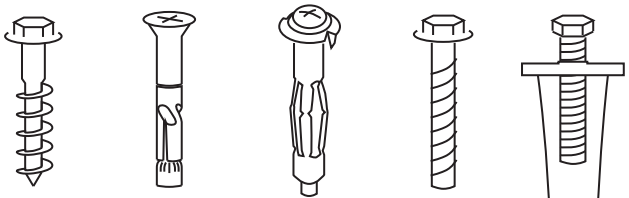


4G SIM Card
Regular - not micro or nano

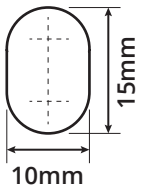
The Torus Administrator has been sent an activation email detailing the requirements for each of these methods. Cabinets must be connected to the internet to function.

Fasteners

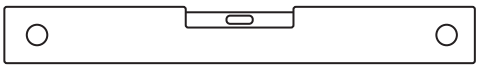
Fasteners are not supplied with the Torus cabinet. Each fastener must hold at least 50lbs / 20kgs and be appropriate for the wall substrate.



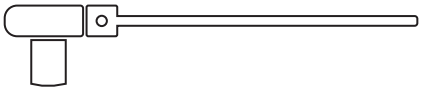
Mounting holes:



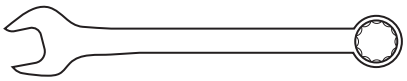
Tools Required



Spirit Level with Magnetic Base



Ratchet Driver with 10mm Socket

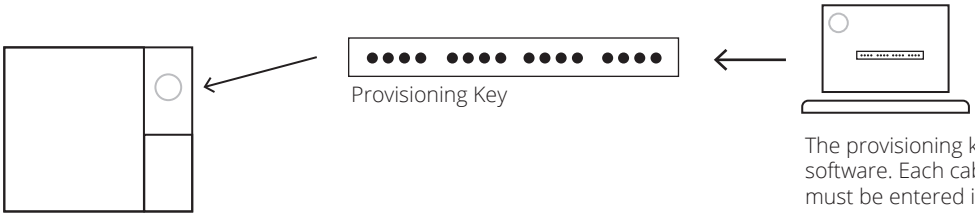


10mm Open Ended Ring Wrench

Plus drill and tools for chosen fasteners.

Note: If a card reader is being installed, additional tools will be required. Refer to card reader mounting instructions.

Provisioning key



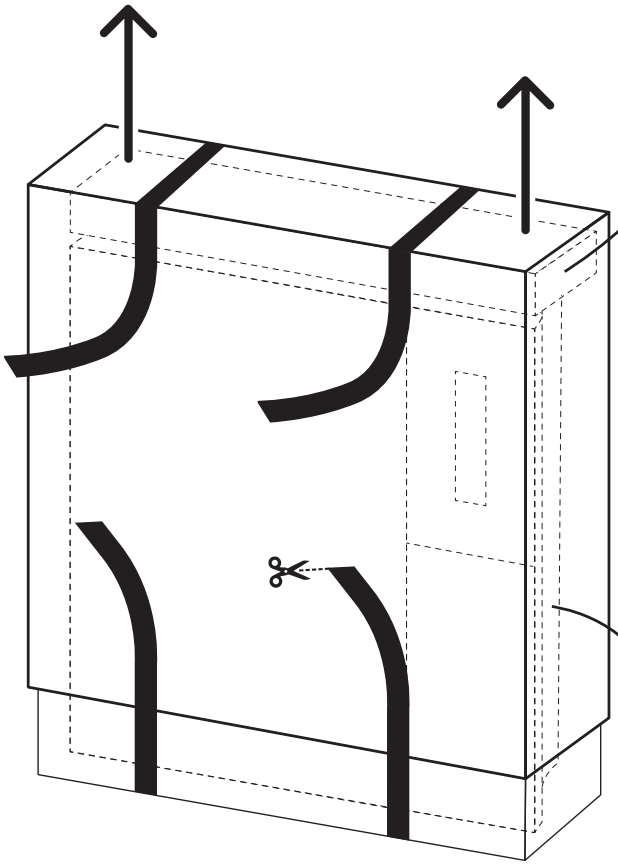
Provisioning Key

The provisioning key is a 12-digit number found in the Torus software. Each cabinet has a unique provisioning key that must be entered into cabinet to complete the installation.

Package Contents

Keeping the cabinet upright at all times, cut the straps and lift the outer box upwards.

Inside there will be a separate box containing cables and accessories.

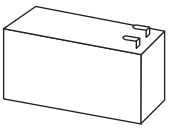


Accessories Box

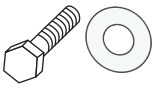
Accessories



Override Key



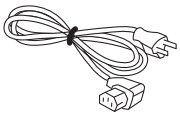
Backup Battery
12V 7AH



Screws & Washers
4 of each



Ethernet Cable
Cat5 Cable (5m)

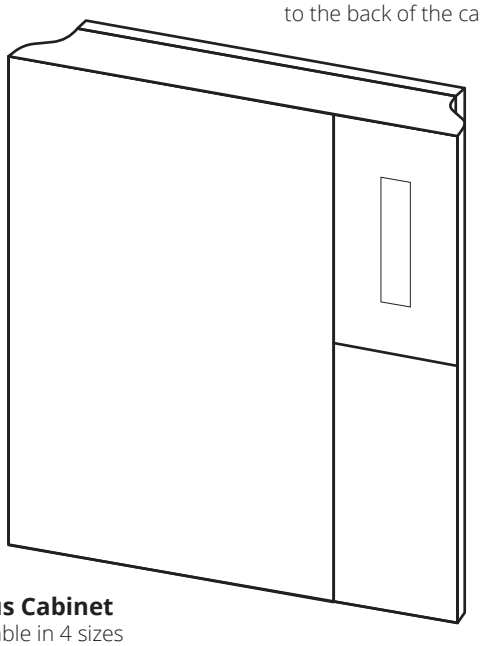


Power Cable
Right Angle IEC Cable (5m)

Other
Key Rings & Accessories

Cabinet & Bracket

Mounting Bracket
Connected but not secured to the back of the cabinet

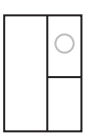


Torus Cabinet
Available in 4 sizes

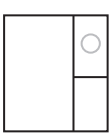
There are 4 sizes of Torus cabinet.

The installation process is largely the same for each size.

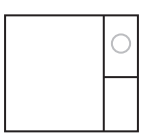
However, the Torus 100:
- attaches to the wall at 6 points instead of 4
- includes an additional strap to support the weight of the keypanel
- has 2 ribbon cables that connect to the Control Unit.



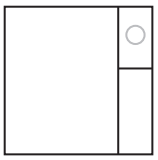
Torus 15
77lbs / 35kgs



Torus 25
92lbs / 42kgs



Torus 50
119lbs / 54kgs



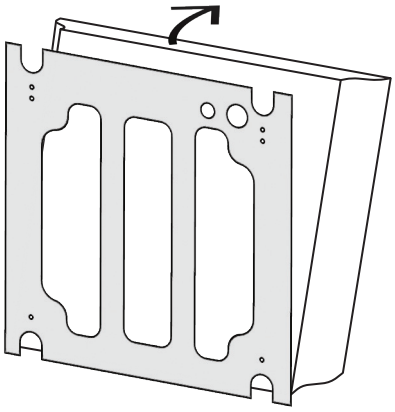
Torus 100
196lbs / 89kgs

Installing the Cabinet

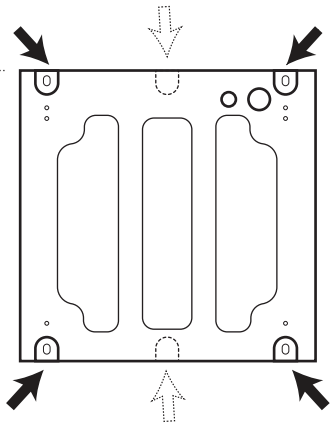
Attach the mounting bracket to the wall

The mounting bracket is connected, but not secured, to the back of the cabinet.

Gently and carefully tilt the cabinet forwards so you can remove the bracket.



Height:
1600mm / 63”
from the floor.



Find the desired location on the wall and mark the holes ensuring the bracket is level. Torus recommends that the top of the bracket is 1600mm / 63” from the floor so the screen will be at eye level, although any height can be chosen based on the customer’s needs.

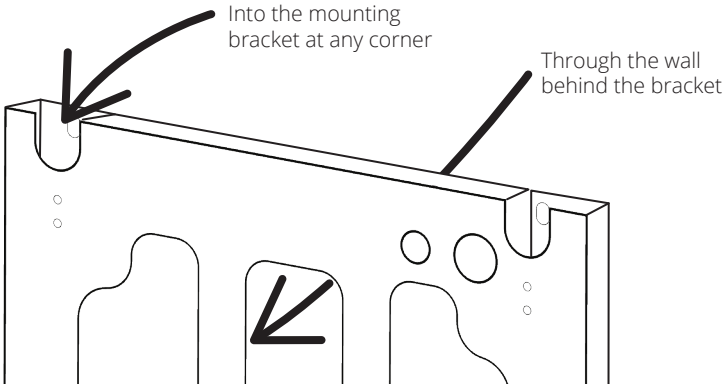
Torus 100 will attach to the wall at 6 locations, whereas the other cabinet sizes will attach at 4 (each corner).

Using appropriate fasteners, secure the bracket to the wall.

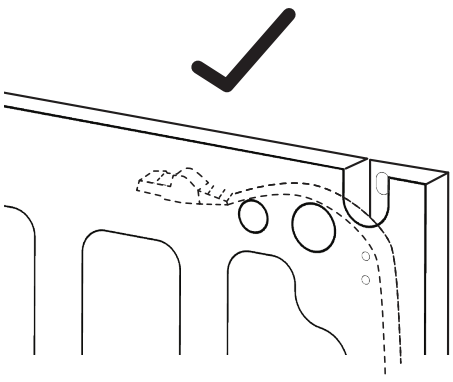
Cable Management

External to the wall
Power and data cables that are on the outside of the wall can enter the mounting bracket at any of the four corners.

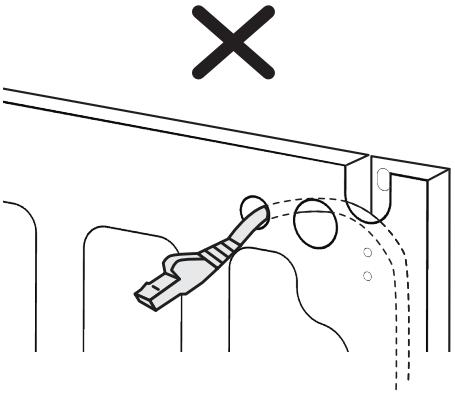
Through the wall cavity
Power and data cables that are run through the wall can enter the cavity behind the bracket at any point.



Prepare Cables

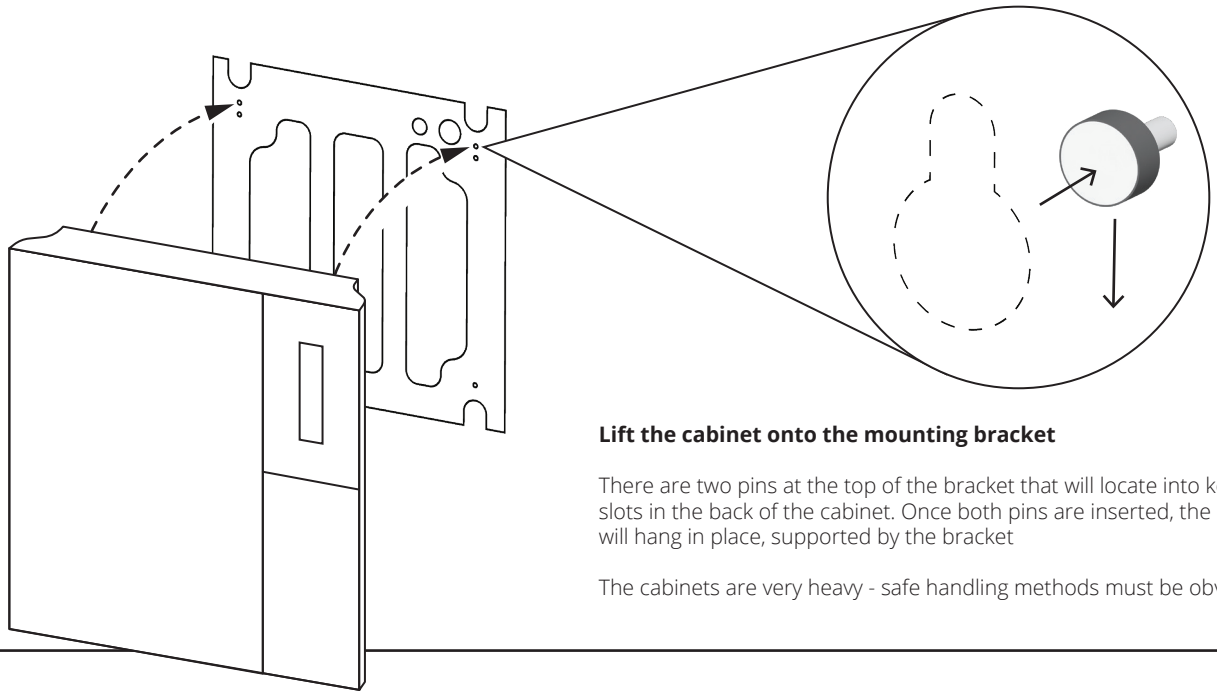


Prepare the cables so they can be retrieved through the cable entry holes in the top right of the mounting bracket.



Ensure that no cables are protruding as they will inhibit the cabinet from attaching and result in damaged cables.

Hang the Cabinet on the Bracket

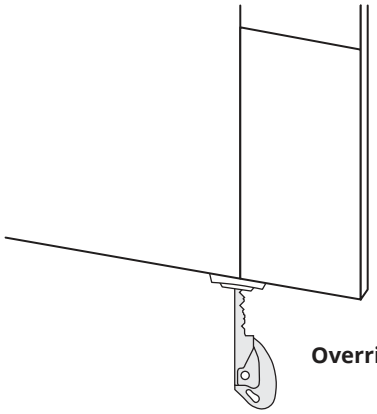


Lift the cabinet onto the mounting bracket

There are two pins at the top of the bracket that will locate into keyhole slots in the back of the cabinet. Once both pins are inserted, the cabinet will hang in place, supported by the bracket

The cabinets are very heavy - safe handling methods must be obvserved.

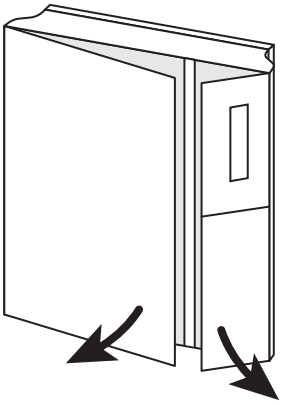
Use the Override Key to Open the Doors



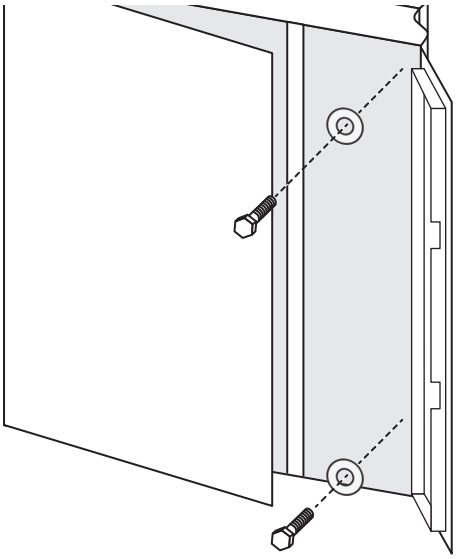
Override Key

Locate the override key and insert it on the underside of the cabinet.

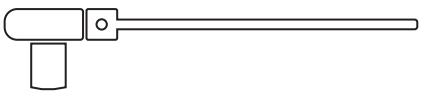
Turning the key will cause the doors to pop open.



Screw the Cabinet to the Bracket



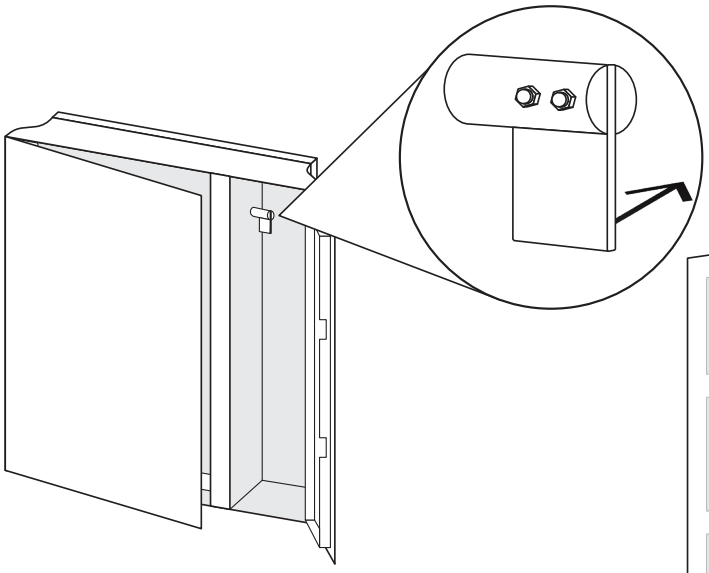
Ratchet driver with 10mm socket

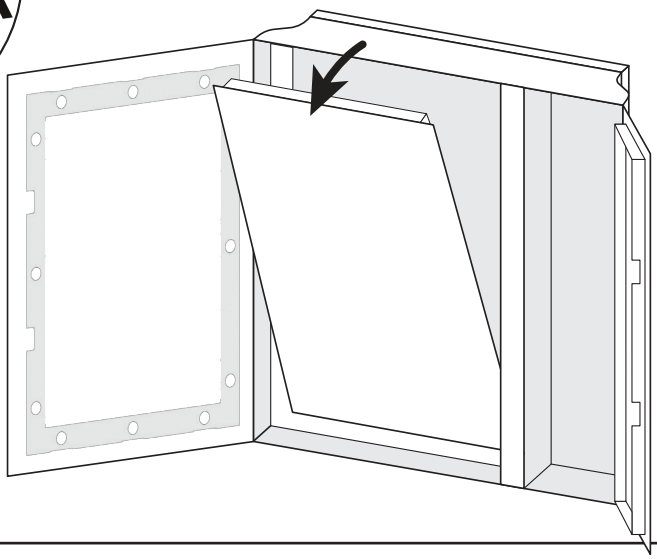


Open the right side door.

Use the screws and washers provided to secure the cabinet to the bracket.

Lower the Keypanel

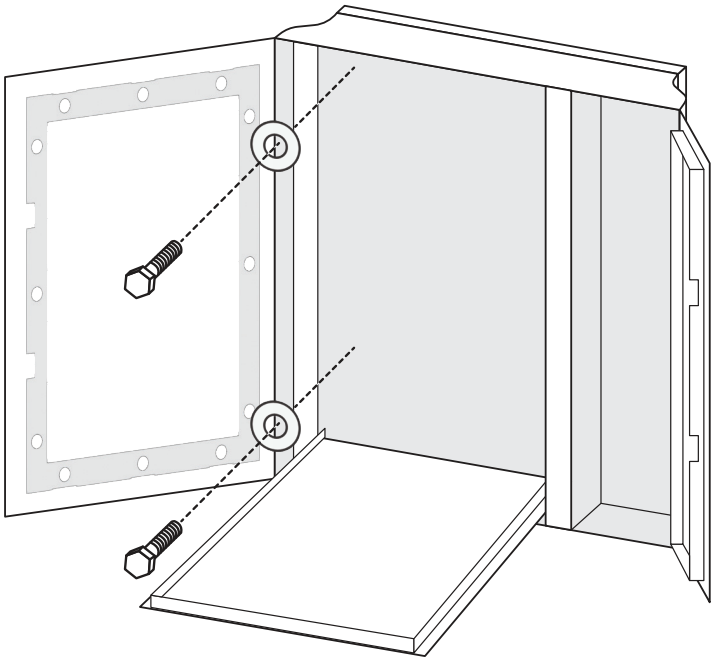




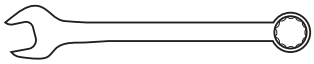
Find the latch in the top of the right side of the cabinet. Gently push it away from you to release the key panel.

Make sure the main door is open and lower the key panel.

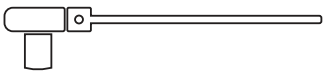
Screw the Cabinet to the Bracket



← **10mm Open Ended Ring Wrench/Spanner**



← **Ratchet Driver with 10mm socket**



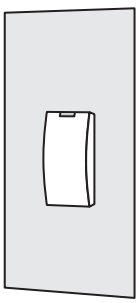
Secure the cabinet to the bracket using the screws and washers provided.

Access is limited around the top left screw so you will need to use the opended spanner/wrench.

Check Connections

With the keypanel lowered, check that all of the boards are seated correctly and the cables are firmly connected.

When complete, raise the keypanel until it locks in place.

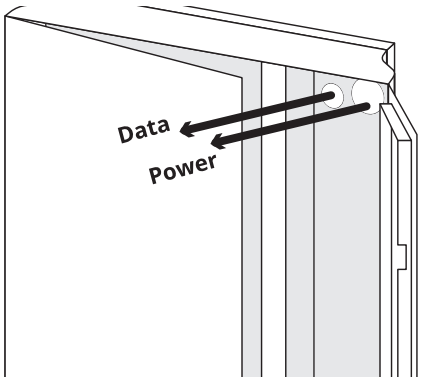


Reader

The cabinet is capable of accepting the input from a reader using OSDP or Wiegand.

If you are installing a reader, skip to supplementary instructions on page 10.

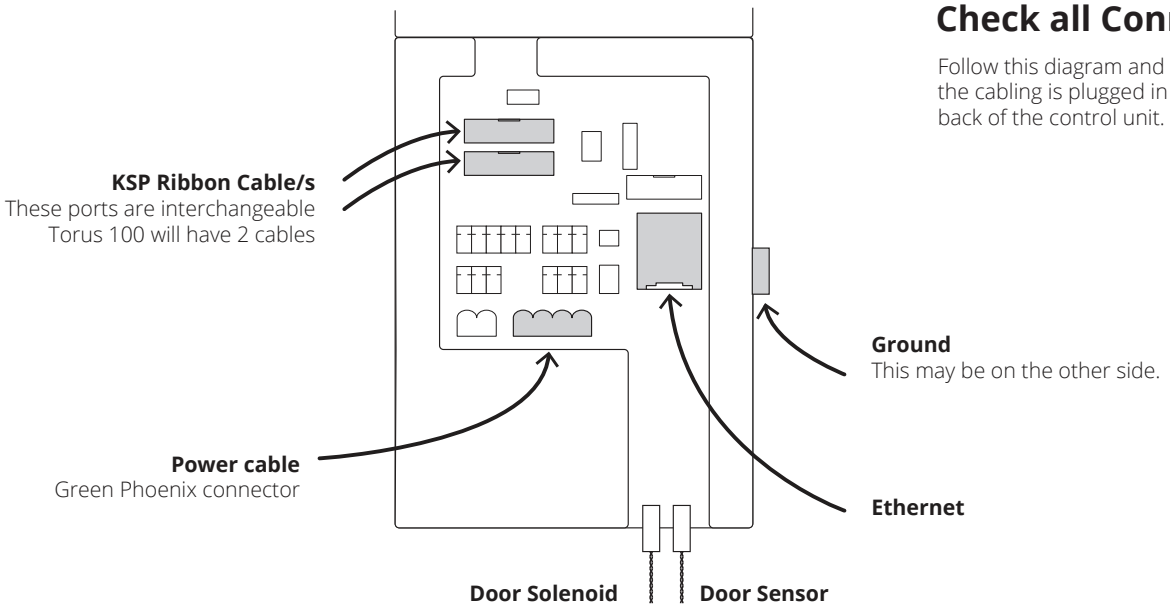
Bring in the Cables



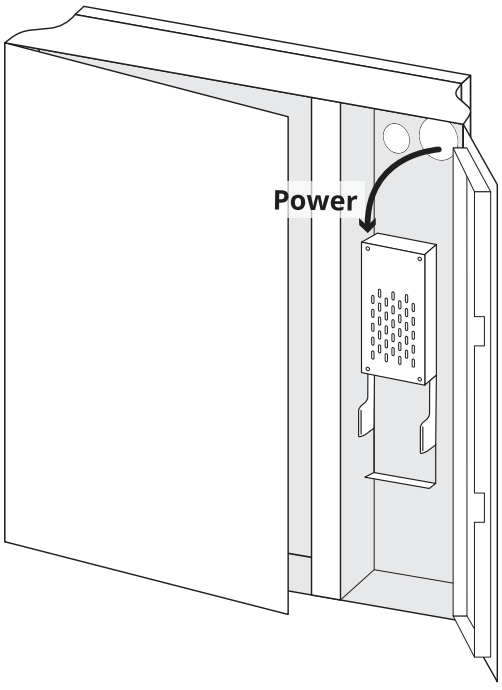
Now that the cabinet is secured to the wall, you can bring the network cable (and power if not using POE) into the cabinet.

Check all Connections

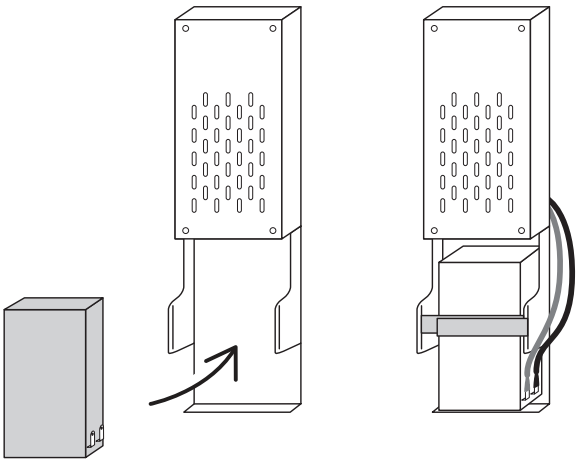
Follow this diagram and make sure all of the cabling is plugged in securely to the back of the control unit.



Connect Power and Backup Battery



If you are not using POE, connect the power cable to the PSU

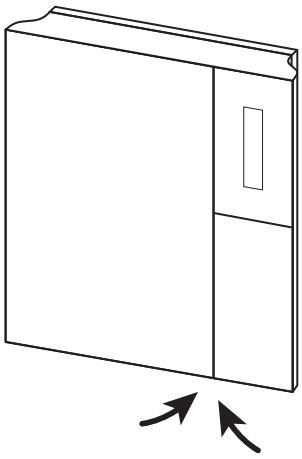


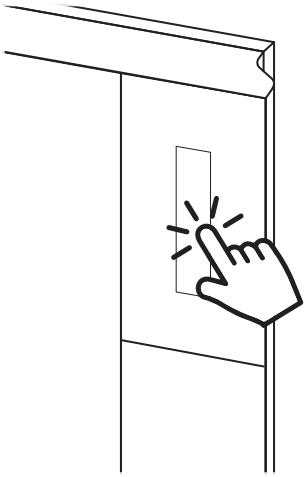
Retrieve the backup battery from the accessories box and insert it beneath the PSU. Attach the red wire to the postive terminal and the black wire to the negative terminal.

Secure battery in place with velcro strap.

Startup the Cabinet

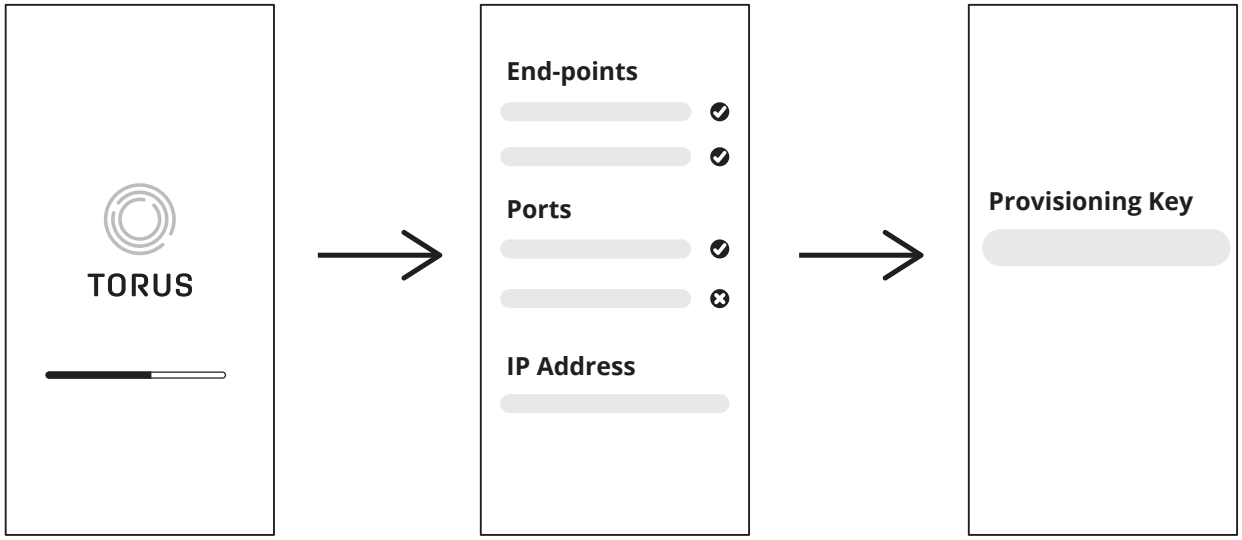
Close both doors.





Tap the screen to boot up the cabinet.

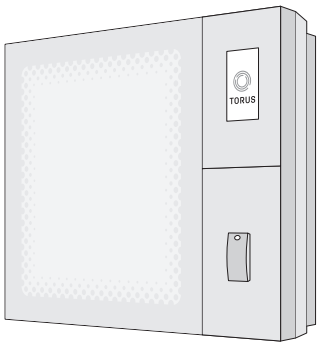
Enter Provisioning Key



The cabinet will show you if the necessary network configurations have been made. If not, you will be unable to progress to the next step.

Enter the provisioning key.

A secure connection will be made between the cabinet and the customer's software account.



Congratulations on completing the cabinet installation.

Thank you for being Torus partner, connect with us here:

torus-technology.com

support@torus-technology.com

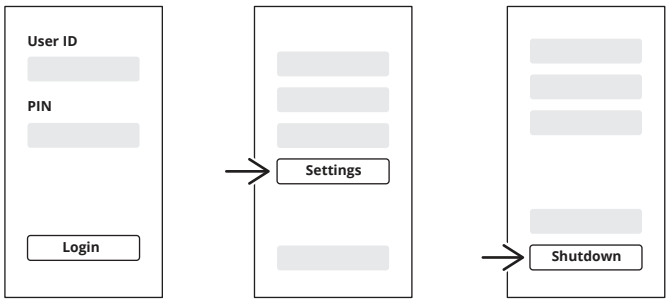
linkedin.com/company/torus-technology

Installing a Reader

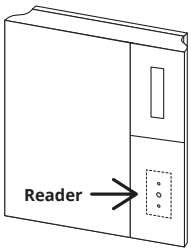
If the cabinet is already in a powered-on state, make sure you gracefully shut it down first.

1. Login as a cabinet admin,
2. Tap settings,
3. Tap shutdown.

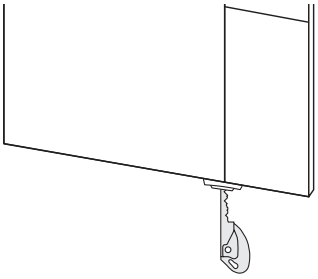
Wait for the screen to turn completely black.



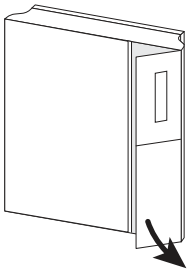
Open Right Hand Door



The reader will be mounted on the panel below the screen.

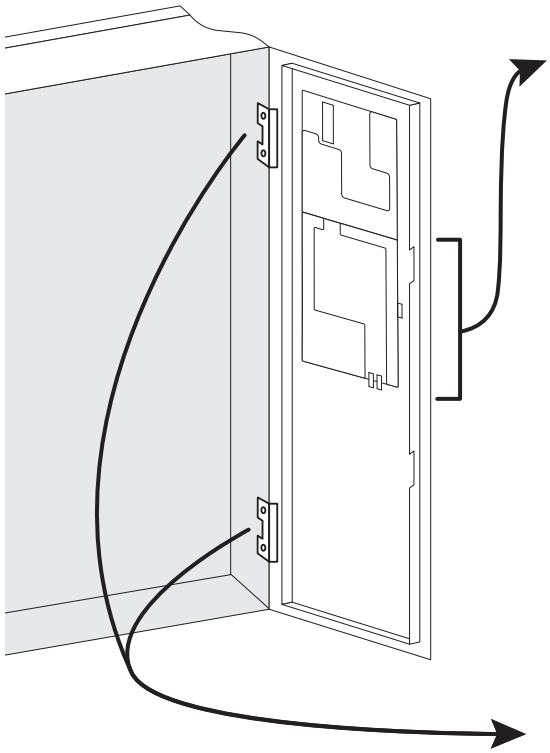


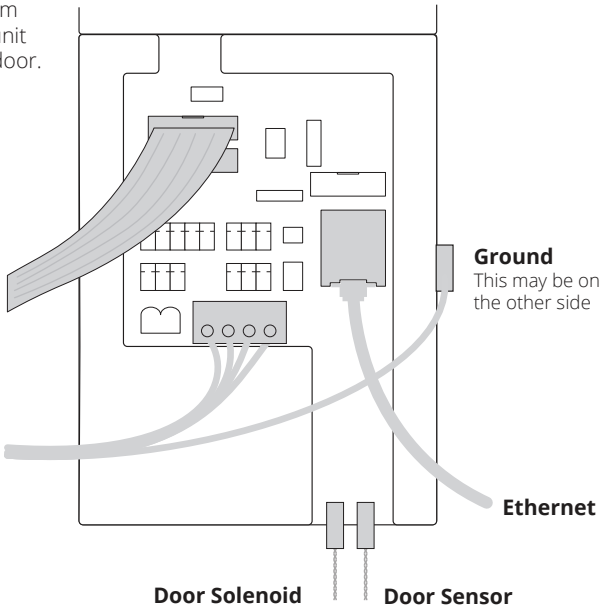
Use the override key to open the right hand door.



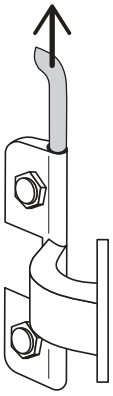
Unplug Cables

Unlplug these cables from the back of the control unit so you can remove the door.





Remove Door



Make sure you are supporting the weight of the door

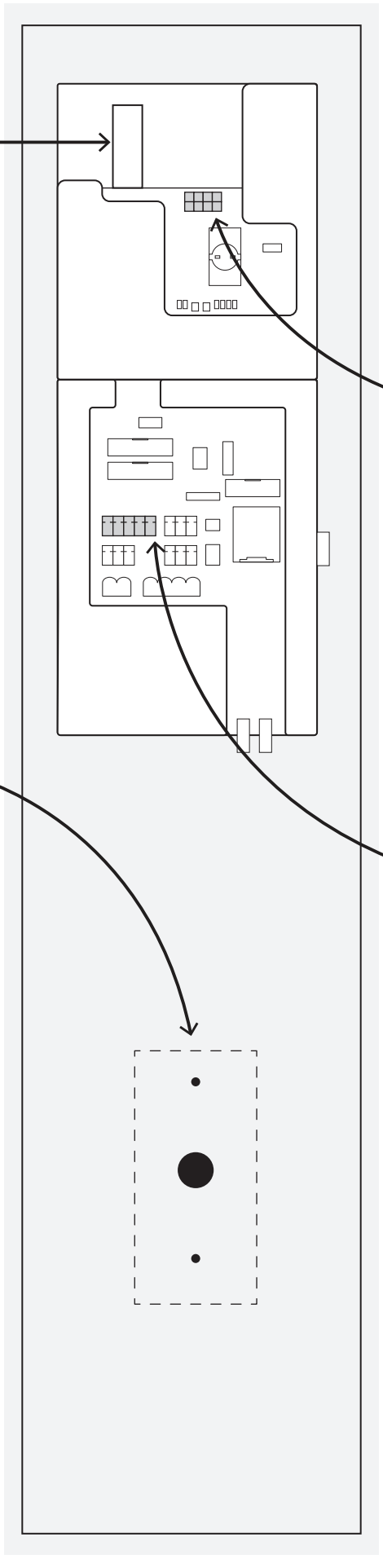
Remove the hinge pins from both the upper and lower hinge.

This will separate the door from the cabinet.

Gently lay the door face down on a non-abrasive surface so as not to scratch the touchscreen.

Be careful of the 4G modem, which protrudes from the control unit.

Rear of Control Unit Panel



Drill Holes

Keep the control unit face down on a non-abrasive surface.

Take special care not to scratch the touch screen.

Mark the center point of the lower panel and drill the holes required for the chosen reader/device.

Remove any shavings or burrs to allow for a flush mounting.

Attach Reader

Feed the cables of the reader through the hole and secure the reader to the panel beneath the screen.

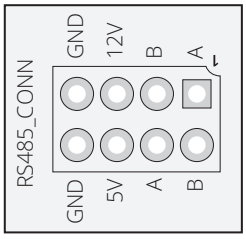
While handling the control unit, be careful of the 4G modem.

Wire the Reader

The cabinet is capable of accepting inputs from Wiegand or OSDP devices.

Every reader is different, so follow the manufacturer's instructions and connect it to the appropriate point on the control unit.

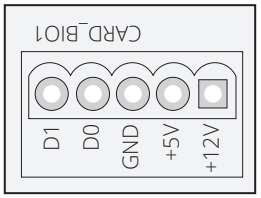
OSDP (RS485)



Use 8 pins, 2 rows, 2.54mm pitch.
TE Connectivity, AMPMODU MOD II Female



Wiegand



Use 5 pin, 3.81mm pitch
Wurth Elektronik 361 Pluggable Terminal Block



Reattach Control Unit

Connect the control unit back to the cabinet by inserting the pins into the hinges.

Plug all of the other cables back in following the diagram on the previous page.

Close the cabinet door.