

USER MANUAL

 **INTECHFLOOR**

Powered by  **technis**

Counting Mats

Gateway model: M2G10

Mat model: M2M10

Mai 2025, v1.1





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Part 1 : Basics

Introduction

Thank you for choosing Intechfloor. Please read this manual thoroughly before operating the product. Make sure the product was not damaged in transit. Should the product be damaged, please contact us and do not use it. Check that you have all the accessories according to your model.

Description

The Mat 2.0 system is the only versatile and modular cutting-edge solution designed to tackle the challenge of people counting and flow measurement with remarkable precision. Whether in event venues, office buildings, retail stores or transportation hubs..., Mat 2.0 optimizes space utilization respecting privacy.

Applications



Event Venues: Whether it is a concert, conference, or exhibition, Mat 2.0 monitors crowd flows. Event organizers can optimize space allocation and enhance safety protocols.



Office Buildings: Mat 2.0 integrates seamlessly into office spaces, providing real-time occupancy data without any complex setup. No hard work required-just actionable insights.



Retail Stores: Mat 2.0 helps retailers fine-tune their store layouts. They can strategically position displays, aisles, checkout counters, and manage staff allocation during peak hours.



Transportation Hubs: At airports, train stations, and bus terminals, Mat 2.0 contributes to streamlined operations. It helps manage passenger flow, reduce wait times, and improve efficiency.

Features



Swiss Quality Standard
Designed in Switzerland



Implementation
No need of calibration, not subject to light exposure variation



Privacy
Privacy by design, no personal info recorded



Real-time
Visitors and Customers counting solution for public spaces



Plug & play
Easy installation without complex setup (no cabling !)



Autonomous
Integrated stand-alone connectivity with 4G



Modular design
Adaptable to various environments



Bidirectional Counting
Allows to track both incoming and outgoing foot traffic



Highly accurate
Swiss precision up to 98%

Gateway

- Do not use Ethernet cables exceeding 10 meters / 32.8 feet long (in case of no use of 4G or WiFi connection).
- Use only shielded Ethernet cables.
- Do not use outdoor.
- Do not expose to temperatures over 50°C / 122°F. Store at room temperature 10°C / 50°F to 25°C / 77°F.
- Do not expose the product to direct sunlight, nor place it near devices that radiate heat, nor leave it inside an enclosed vehicle.
- Do not expose the product to water nor excessive moisture.
- Do not subject the product to impacts nor drop it.
- Do not step nor roll over the cables.
- Do not open any casing.
- Do not replace any battery.
- Disposal of a battery into fire or a hot oven, or mechanically crushing or cutting a battery, can result in an explosion.
- Leaving a battery in an extremely high temperature surrounding environment can result in an explosion or the leakage of flammable liquid or gas.
- A battery exposed to extremely low air pressure can result in an explosion or the leakage of flammable liquid or gas.
- Only use the supplied power cord.
- Only connect the supplied power cord to a socket-outlet with protective earthing conductor.
- Unplug the power cord if the equipment is not to be used for an extended period.

Mat & Mat-to-Gateway connector

- Do not use outdoor.
- Do not extend the Mat to Gateway cable to a total length exceeding 8 meters / 26.3 feet.
- Do not expose to temperature over 50°C / 122°F. Store at room temperature 10°C / 50°F to 25°C / 77°F.
- Do not expose the products to direct sunlight, nor place it near devices that radiate heat, nor leave it inside an enclosed vehicle.
- Do not expose the product to water jets.
- Do not immerse the product.
- Do not subject the product to severe impacts nor drop it.
- Do not step nor roll over the cables.
- Do not expose the product to extreme weight (over 500kg / 1102.3lb).
- Do not install the product without a cover layer.
- Do not open any casing.

Part 1 : Basics

Basic operations

- If you want to turn the product on or off, plug in or unplug the power cord from the Gateway.
- The Mat system connects to the Internet via the built-in 4G module, depending on your subscription. Additionally, you can connect via Ethernet by plugging in an Ethernet cable or set up a WiFi connection. The WiFi and/or the Ethernet connection you use must not require identification on a web portal (captive portal). If any firewall rules are defined on your WiFi and/or the Ethernet connection, make sure there are no restrictions on the URL/IP listed at the end of the Gateway Specifications (see *List of IPs/URLs used by the Gateway*).

Optimal counting

- As a general rule, make sure that the flow of people is as smooth as possible, without anyone stopping or wandering on the Mat system.
- The passage must be covered with mats across its entire width.
- Make sure that each person takes at least one step on at least one Mat when passing the passage.
- Make sure that there are no people standing still or standing in line on the Mat system.
- Make sure that, if any, the security staff is neither standing still nor wandering on the Mat system.
- Make sure no cables stand in the path's way.
- Underneath the Mat system, make sure that there are no cables, cable passthroughs, roughness nor protrusion.
- Over the Mat system, make sure that there are no cables or cable passthroughs.
- Please ensure that people do not wipe their feet on the protective covering.

Ground

- The device must be placed on level ground.
- The floor underneath the Mat must be as clean, rigid and flat as possible.
- If used on wood chips, paved floor or any non-flat surfaces, it is strongly recommended to place a rigid underlayer such as a plastic or wooden board.

Outdoor use

- The Mat system is not intended for outdoor use. For more information, please contact us.

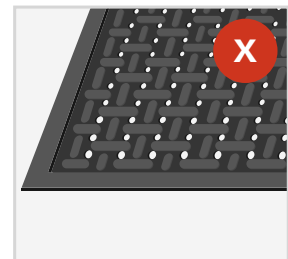
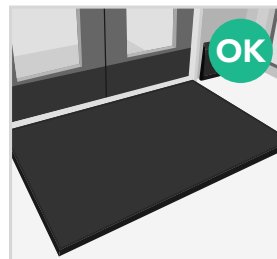
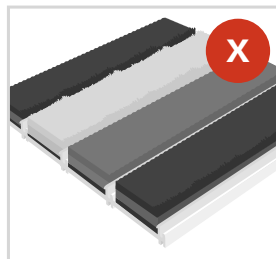
Mat Protection & cover requirements

The Mats must be covered with a protective layer. We strongly recommend using an entrance mat. Here are the specifications of the cover layer to use and secure the counting performance:

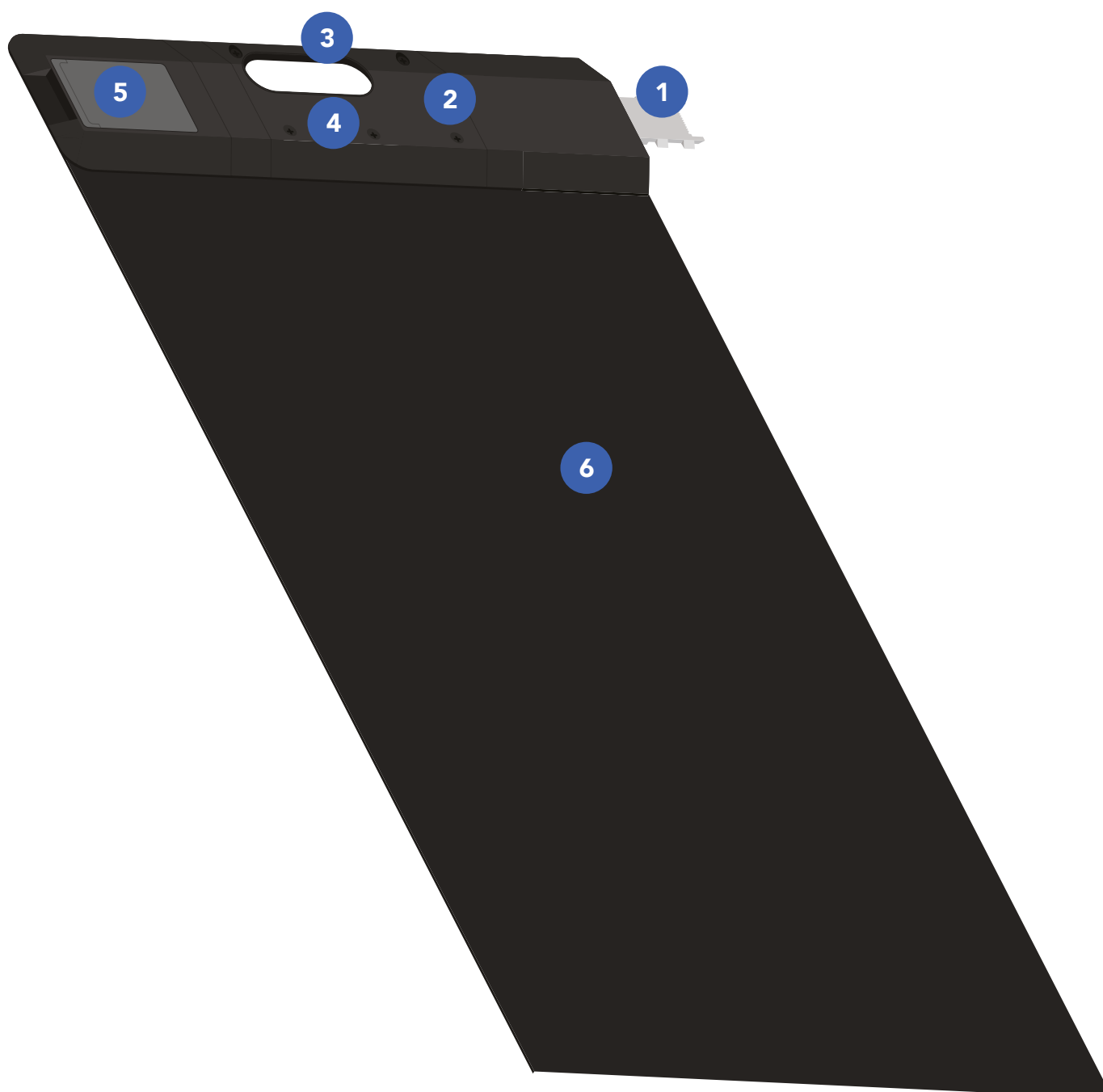
- **Size:** The cover must extend at least 15 cm / 5.9 in beyond each side of your Mat installation.
- **Thickness:** The thickness of the cover should not exceed 15 mm / 0.56 in.
- **Weight:** The weight of the cover should not exceed 3.5 kg/m² / 0.717 lb/ft².
- **Texture:** The texture must be as homogeneous as possible. Specific patterns should be avoided.
- **Grid systems:** Grid systems must be avoided.



The Technis support team is at your disposal to advise you if necessary.



Part 2 : Specifications



1 Male connector

3 Handle for handling

5 Female connector

2 Status LED

4 Casing

6 Pressure sensor



Please note that the design of the Mat—including colors, materials, and finishes—is subject to change or evolution. Therefore, the product images provided may differ slightly from the actual item delivered. However, the fundamental functionality and operation of the product remain unchanged.

Mat specifications	
Length	1 m / 39.37 in
Width	0.59 m / 23.23 in
Thickness	12 mm / 0.47 in
Weight	2.8 kg / 6.17 lb per Mat
Operating humidity	35-65% RH
Operating temperature	0-50°C / 32-122°F
Storage temperature	10-25°C / 50-77°F
Materials	PC-ABS, SUS304, SGCC, POM, ADC12, PET, EPDM rubber
Load resistance	500 kg / 1100 lb
Sensibility	0.9 kg/m ² / 0.021 oz/in ²
Technology	Pressure sensor
Precision	Up to 98%
Supply voltage	12 VDC
Maximum power	0.6 W per Mat
Daily electrical consumption (24h)	14.4 W per Mat
Certifications	CE Standard FCC Standard IP54 EN IEC 61000-6-3 EN IEC 61000-6-1

Part 2 : Specifications



1 Button + Status LED

3 Ethernet socket

5 Bottom face : QRcode

2 Mat socket

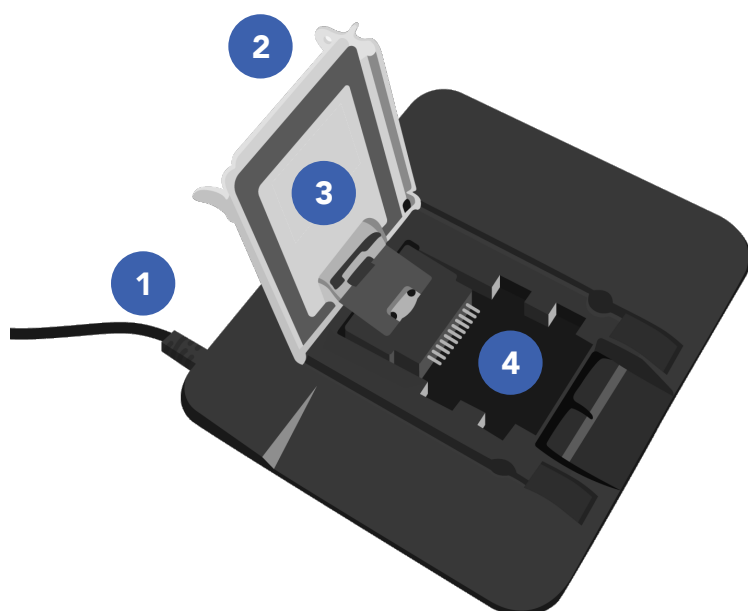
4 Power socket



Please note that the design of the Gateway—including colors, materials, and finishes—is subject to change or evolution. Therefore, the product images provided may differ slightly from the actual item delivered. However, the fundamental functionality and operation of the product remain unchanged.

Gateway specifications	
Length	156 mm / 6.14 in
Width	177 mm / 6.97 in
Height	97 mm / 3.82 in
Weight	610 g / 1.34 lb
Materials (housing)	PC-ABS
Operating humidity	35-65% RH
Operating temperature	0-50°C / 32-122°F
Storage temperature	10-25°C / 50-77°F
Connectivity	WiFi, Ethernet, 4G
WiFi maximum Tx power	18.9 dBm / 77.5 mW
4G maximum Tx power	23.0 dBm / 199.5 mW
Ethernet class	10BASE-T / 100Base-TX, CAT5
Supply voltage	220-240 VAC, 50-60Hz
Maximum power	30 W
Daily electrical consumption (24h)	0.72 kWh
Shut down battery	3.6 V, 800 mAh, NiMH
Certifications	CE Standard FCC Standard EN 62368-1 EN 300 328 EN 301 489-1/17 EN 62311 EN 301 511 EN 301 908-1/2/13 EN 301 489-1/52 EN 62311 EN 55032 EN 55035 EN 61000-3-2/3

Part 2 : Specifications



- 1 Cable to Gateway
- 2 Latch
- 3 Lid
- 4 Connector slot for Mat

Mat-to-Gateway connector specifications

Length	176 mm / 6.93 in
Width	152 mm / 5.98 in
Thickness	12 mm / 0.47 in
Cable Length	3 m / 9.8 ft
Weight	77 g / 0.25 oz
Materials (housing)	SUS304, SGCC, POM, ADC12
Operating humidity	35-65% RH
Operating temperature	0-50°C / 32-122°F
Storage temperature	10-25°C / 50-77°F
Certifications	CE Standard IP54



Please note that the design of the Mat-to-Gateway Connector—including colors, materials, and finishes—is subject to change or evolution. Therefore, the product images provided may differ slightly from the actual item delivered. However, the fundamental functionality and operation of the product remain unchanged.

Extension cable specifications	
Length (cable)	5 m / 16.40 ft
Diameter (cable)	5 mm / 0.20 in
Diameter (connector)	12 mm / 0.47 in
Weight	18 g / 0.64 oz
Certifications	CE Standard IP54

List of IPs / URLs used by the Gateway

The system communicates through the Gateway with a defined set of web services for connectivity checks and data transmission. Specifically, it requires access to the following addresses:

- www.google.com (port 80)
- www.baidu.com (port 80)
- www.yahoo.com (port 80)
- www.qq.com (port 80)
- www.microsoft.com (port 80)
- www.amazon.com (port 80)
- 8.8.8.8 (port 80)
- a3rarku9xyoxcd-ats.iot.eu-central-1.amazonaws.com (port 8883)
- 130.211.102.45 (port 443)
- www.amazonaws.com (port 8883)
- amazonaws.com (port 8883)

Communication with these addresses is safe and used solely for verifying connectivity and securely transmitting data. However, it is essential to ensure these specific addresses and ports are accessible and explicitly allowed through your firewall configuration. Failure to grant access to these destinations may result in the system malfunctioning or failing to operate properly.

Part 2 : Specifications

FCC Statement

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

WARNING: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

IC Statement

This device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

The device is compliance with RF field strength limits, users can obtain Canadian information on RF exposure and compliance.

Le présent appareil est conforme aux limites d'intensité de champ des radiofréquences. Les utilisateurs peuvent obtenir les informations canadiennes sur l'exposition aux RF et leur conformité.

This Class B digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

CAN ICES-003 (B)/NMB-003(B)

This equipment complies with IC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

Déclaration d'exposition aux radiations:

Cet équipement est conforme aux limites d'exposition aux rayonnements IC établies pour un environnement non contrôlé. Cet équipement doit être installé et utilisé avec un minimum de 20 cm de distance entre la source de rayonnement et votre corps.

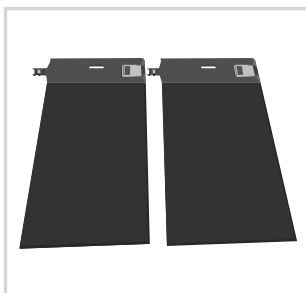
RF Exposure Compliance

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator and your body. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

Part 3 : User guide & assembly guide

Assembly of the Mats together

If you have more than one Mat to connect, please follow this operation.
The operation is the same for two to ten Mats.



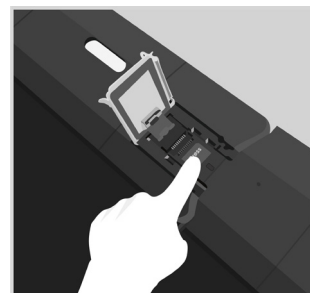
Place the 2 Mats side by side.



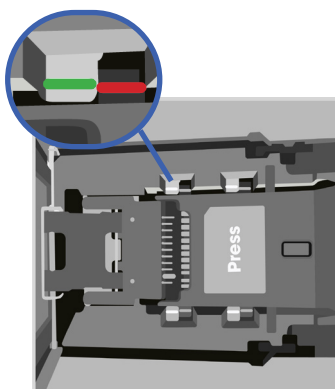
Open the lid.



Place the male connector of the Mat on the right in the female connector of the Mat on the left.



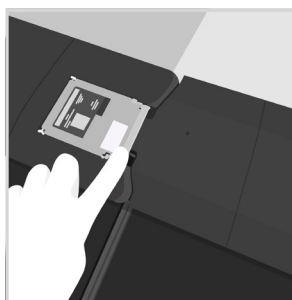
Ensure a proper mechanical and electrical connection by pressing on the "Press" label.



You should see the 4 red lines being covered by four green lines.



Close the lid.



Close the latch.

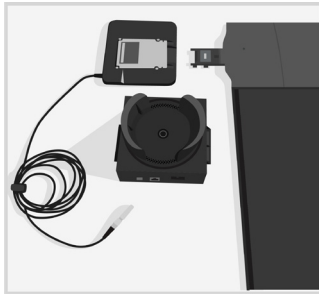


You can now connect the Gateway by following the next step.



Please avoid moving or manipulating the counting mats once connected together, as doing so may damage the mechanical locking system and connectors. Always assemble and connect the mats directly at their final installation location.

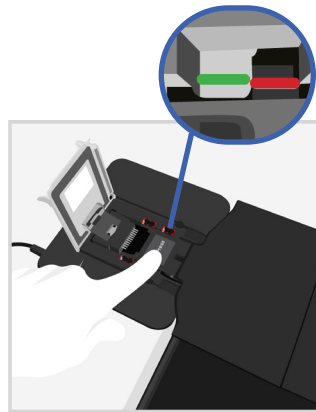
Mats to Gateway connection



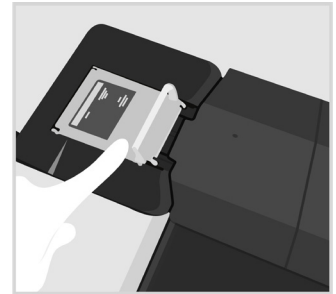
Place the Mat, the Mat-to-Gateway connector and the Gateway side by side.



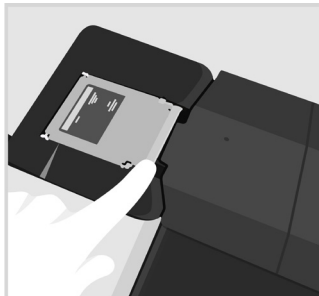
Open the lid of the Mat-to-Gateway connector.



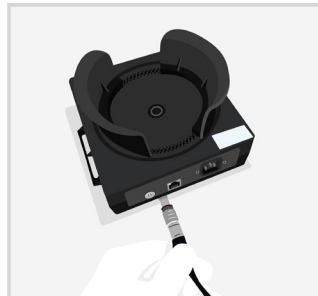
Place the Male connector of the Mat inside the female connector and ensure a proper mechanical connection by pressing on the "press" label.



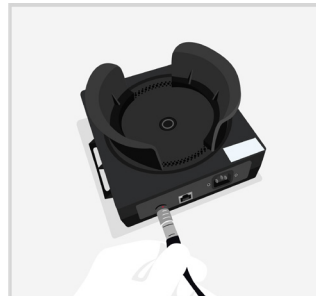
Close the lid.



Close the latch.



Connect the cable of the Mat-to-Gateway connector to the Gateway.



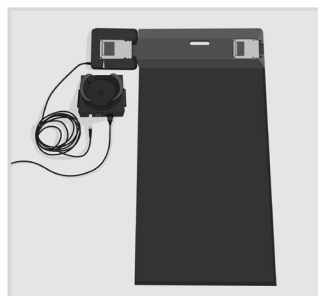
The red dot on the connector must face up.



Connect the power plug on the Gateway.



Connect the power plug to an electrical outlet.



You are now ready to configure your counting system.

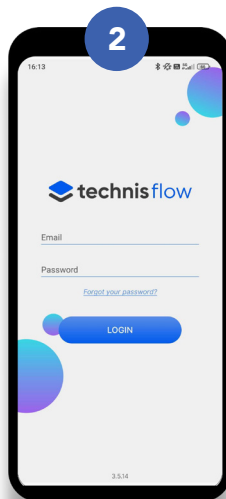


As a reminder, a maximum of 10 Mats can be connected to one Gateway. Accessories are also available to extend the length of the cable running from the Mat-to-Gateway connector to the Gateway. Use only shielded Ethernet cables.

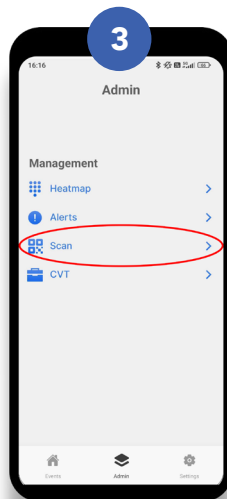
Part 3 : User guide & assembly guide

Technis counting app - User manual

- 1 To configure your counting system, if not already done, download the Technis app.



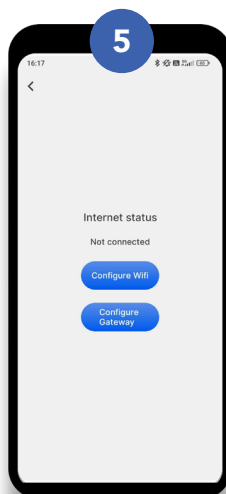
Connect to the Technis app using your user account. If you don't have an account, please contact support.



Tap on the **Admin** tab on the bottom bar, and tap on **Scan**.



Approach the camera of your smartphone to the QR code of the Gateway, placed at the back of the Gateway.

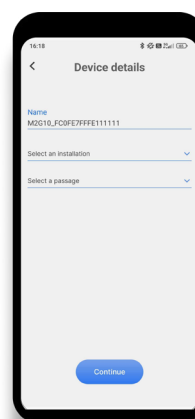


If you want to use the embedded 4G connection or an Ethernet connection, tap on **Configure Gateway**. If you need to connect to a WiFi network, tap on **Configure WiFi**.

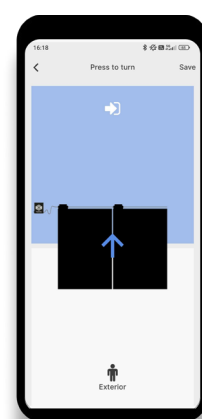
6

Follow the instructions within the app

The illustrations bellow will help with the configuration of the device details and the counting direction



The name of the device will appear on your dashboard, you can choose it. Select the installation you want to link your Mats system to. Select the passage that the Mats are currently covering.



Tap on the Mats illustration to rotate them. The blue arrow indicates the "Going into the zone" direction. As an example, in this picture, it means that a person moving from the "Exterior" to the "Zone name" zone is counted as an In count for the zone.

LED statuses if you take the option to configure a WiFi

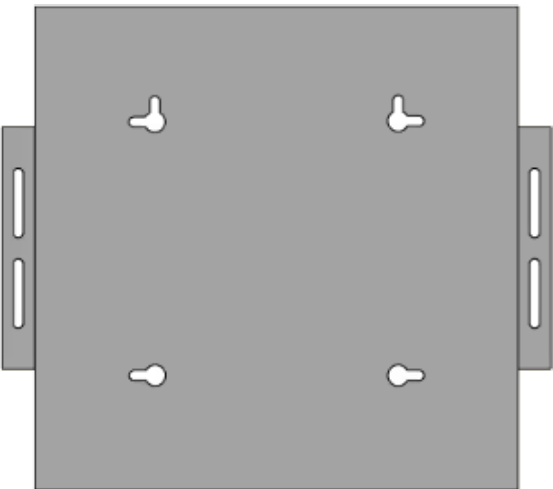
Blinking blue		Initialization or Configuring	<u>Before configuration:</u> The Gateway is initializing for configuration. <u>After configuration:</u> The Gateway is checking the configured WiFi
Steady Magenta		Waiting configuration	The Gateway is waiting for the user to push the configuration

After a configuration (WiFi configuration only), the Gateway reboots and displays the following sequence on the LED:

- Around 30 seconds blinking blue → The Gateway is checking the configured WiFi.
- 5 seconds steady.
 - Green → The Gateway has successfully connected to the configured WiFi.
 - Red → The Gateway has failed to connect to the configured WiFi.
- Around 30 seconds blinking blue → The Gateway is rebooting and will enter standard operation.

Gateway wall mounting

The Gateway has two means of attachment: The back keyhole slots or the side wings. Mounting the Gateway on a wall is optionnal.



Reference screws (not included):	
Diameter	2.5 mm / 0.1-0.12 in
Head	4.5-6 mm / 0.18-0.24 in
Length	8-10 mm / 0.32-0.40 in
Material (recommended)	Steel 1018A, nickel or blue & white zinc plated

Part 3 : User guide & assembly guide

LEDs statuses

LED statuses during standard operation for the gateway

Blinking green		Initialization	The system is booting. This operation may take up to 3 minutes
Steady green		Working properly	The system is working properly and the system is counting
Steady yellow		No Mats connected	The Gateway does not detect any Mats
Steady blue		No Internet connection	The Gateway is not connected to the Internet
Steady red		Error	There is an error on your system. Try rebooting the Gateway by unplugging and plugging it back in. If the error persists, contact support
Steady magenta		Configuration mode	The Gateway is in Configuration mode. Without any user intervention, this mode lasts for 3 minutes
Blinking blue		Configuring	The Gateway is performing tasks for configuration. It may take up to 2 minutes
Fade In-Out magenta		Updating	The Gateway is updating. DO NOT UNPLUG THE GATEWAY DURING THIS OPERATION

LED statuses if you take the option to configure a WiFi

Blinking blue 	Initialization or Configuring	<u>Before configuration:</u> The Gateway is initializing for configuration. <u>After configuration:</u> The Gateway is checking the configured WiFi
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Steady Magenta 	Waiting configuration	The Gateway is waiting for the user to push the configuration
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After a configuration (WiFi configuration only), the Gateway reboots and displays the following sequence on the LED:

- Around 30 seconds blinking blue → The Gateway is checking the configured WiFi
- 5 seconds steady
 - Green → The Gateway has successfully connected to the configured WiFi
 - Red → The Gateway has failed to connect to the configured WiFi
- Around 30 seconds blinking blue → The Gateway is rebooting and will enter standard operation

LED statuses for the mats

Blinking green 	Initialization	The system is booting. This operation may take up to 3 minutes
--	----------------	--

Steady green 	Working properly	The Mat is working properly and the system is counting
--	------------------	--

Steady blue 	Error	Replace this Mat with a new one
---	-------	---------------------------------

Steady red 	Error	Replace this Mat with a new one
--	-------	---------------------------------

Support

Should you have any question or encounter any issues, please contact our support team



+41 21 519 07 21



+33 1 72 06 04 99

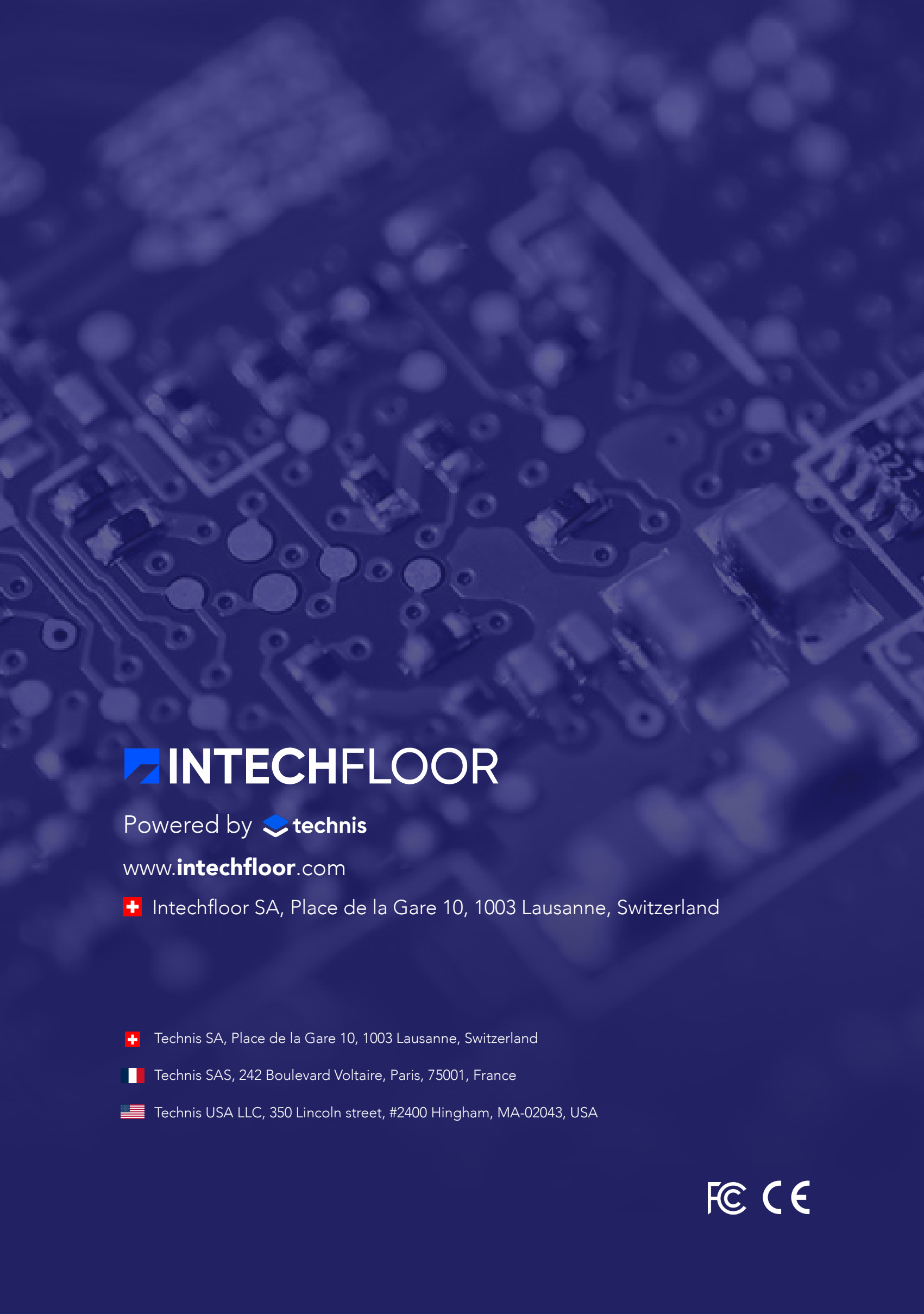


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