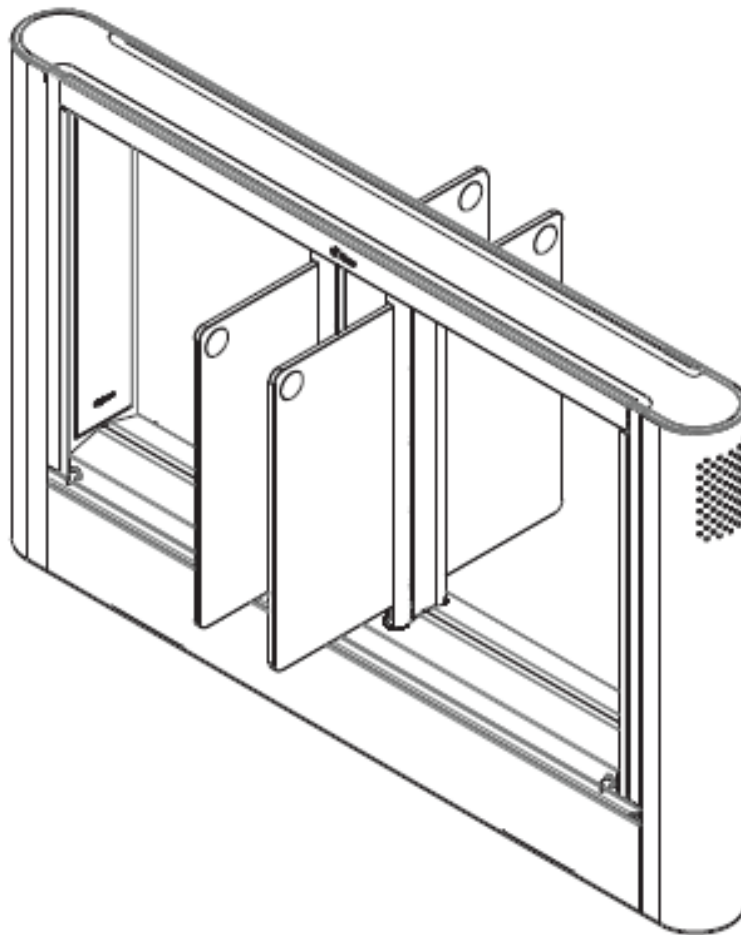

d'Flow G4



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00	03/08/2023	Carlos ACS Junior	 Document creation

 **ATTENTION!** : Digicon reserves the right to modify the features of its products at any time to adapt them to the latest technological developments.

 **ATTENTION!** : Digicon reserves the right to change the information contained in this manual without prior notice.

 **ATTENTION!** If in doubt, consult your Digicon representative. If the consult is not carried out Digicon's interpretation will prevail

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1. Presentation

When we combine innovation with robustness, design, and reliability, we find the best solution in access control. Digicon presents a solution designed down to the smallest detail to bring a new concept to the market. From an intense process of research into global trends and exhaustive engineering work, the dFlow equipment is born.

Learn more about our products by accessing our website through the QR code below.



2. Guidelines

This will ensure the correct use of the equipment and the maximum utilization of its technical resources, as well as extending its lifespan. This product does not provide protection against rain, meaning it is designed for use in covered environments. Additionally, this product is not intended for direct sunlight exposure. Keep this manual for future reference. Digicon reserves the right to modify the features of its products at any time to adapt them to the latest technological developments. Digicon also reserves the right to change the information contained in this manual without prior notice. Digicon provides no contractual warranty regarding the information contained in this manual and shall not be held responsible for any errors it may contain or for any problems caused by its use. The information contained in this manual is the exclusive property of Digicon and is protected by copyright law. This manual may not be reproduced, photocopied, or translated, in whole or in part, in any media, without the written permission of Digicon. The equipment described in this manual is customizable, meaning all possible models are described herein, and they may not necessarily reflect the equipment acquired by the customer.

3. Environmental Requirements

The materials used to package the product are easily separable (screws, bubble wrap, wood, cardboard), making proper disposal of the items more accessible. The dFlow equipment contains recyclable and/or reusable materials in its construction. In cases of part or component replacement, seek specialized services for item separation. When disposing of the equipment, ensure that it is done in accordance with local regulations.

4. Supplementary Manuals

In addition to this manual, we have four more documents. They are:

- Integrator Manual
- Support and Maintenance Manual
- Installation Manual

5. Safety Instructions

This manual contains several safety messages. Please read and follow them to promote your safety and that of others.

5.1. Applicable Symbols:

-  **ATTENTION!** Describes something important that should be known by the qualified technical professional and the user.
-  **CAUTION - RISK OF INJURY!** Describes situations of risk that can lead to injury and/or harm.
-  **CAUTION - RISK OF DEATH!** Describes high-risk situations that may lead to death. These cases are related to interaction with the internal part of the equipment, and it is advisable to use a **qualified technical professional**.

Read and keep the instructions in this manual: Read and keep this Product Manual for future reference. Read all safety instructions carefully before unpacking, installing, operating, and performing any maintenance on the equipment.

Follow the instructions and the warnings and cautions carefully: Pay attention to all warnings, cautions, and precautions in the operation instructions, as well as those posted on this equipment. The warnings and cautions are essential for the protection of the user and the qualified technical professional, as well as for the longevity of equipment use.

5.2. Terminology:

The defined terms below are used in this document. The given definitions are based on those found in safety standards.

Qualified Technical Professional: The term Qualified Technical Professional applies to individuals trained and certified by Digicon who are authorized to install, replace, or provide technical assistance for their equipment. It is recommended that the Qualified Technical Professional utilize their experience, technical skills, and best practices to prevent potential injuries to themselves and others due to risks present in restricted access areas. This approach should be taken to mitigate risks and also to increase the equipment's lifespan.

 **ATTENTION!** Installation and/or maintenance provided by an unqualified technician may void the equipment warranty.

User: The term "user" applies to individuals who are not qualified technical professionals and utilize the equipment.

5.3. Risks

The following safety information and warnings are provided to protect you from injury and to prevent damage to the equipment.

Children and individuals requiring assistance may be unable to assess the risks associated with using the equipment, potentially causing injury or putting themselves in life-threatening situations.

Special attention should also be given to animals that are near the equipment.

Below, we will mention risks that must be taken into account in various situations:

5.3.1. Risks when unpacking the equipment

ATTENTION!

- Always use the appropriate tools;
- Always use the necessary PPE (Personal Protective Equipment) (gloves, shoes, and protective glasses).

CAUTION - RISK OF INJURY!

- Be careful when handling equipment packaging, as they are made of wood and may splinter.
- The packaging is heavy, be careful not to tip it over, as it can cause injuries and also damage to the equipment.
- Thin steel blades are used in the construction of the packaging, which can cause cuts and injuries.
- Be careful when removing the lid from the packaging, as it may fall, causing injuries and damage to the equipment.
- To remove the screws that secure the equipment to the base of the packaging, the glass side doors must be removed. Handle with care and place them in a safe location.
- Be careful with your hands and feet when removing the equipment from the base of the packaging and positioning it at the installation site.

5.3.2. Risks during equipment installation.

ATTENTION!

- All installation steps must be performed by a qualified technical professional, and appropriate tools and PPE must be used.
- Before connecting the electrical power, conduct a detailed inspection of the installation.
- Always perform movement/installation between two people. Overweight can cause damage or injuries.

CAUTION - RISK OF INJURY!

- Be careful when positioning this equipment at the installation site, as its size and weight can cause injuries.
- During the initial operation phase, the doors may move. Keep the passageway clear, avoiding collisions with objects and people.
- Risk of falling during sensor installation.

 CAUTION - RISK OF DEATH!

- This equipment operates with dangerous electrical voltages. To avoid the risk of electric shock, installation must be carried out exclusively by a qualified technical professional.
- Before performing any procedure, make sure that the electrical power is switched off.

5.3.3. Risks in equipment usage

 CAUTION - RISK OF INJURY!

- Caution, this is an access control equipment, the doors may close in certain situations. The impact of the doors with the human body can cause bruises and even fractures.

 CAUTION - RISK OF DEATH!

- Children and individuals needing assistance should be under constant supervision, as they may not be able to assess the risks associated with equipment use, which could result in injury or life-threatening situations.

5.3.4. Risks in equipment maintenance

 ATTENTION!

All maintenance steps must be carried out by a qualified technical professional, and appropriate tools and PPE must be used.

 CAUTION - RISK OF INJURY!

- Be careful with your hands and fingers during the maintenance process, as door movement mechanisms can cause serious injuries.

 CAUTION - RISK OF DEATH!

- The equipment has several glass parts. Always wear protective glasses;
- Before performing any procedure, make sure that the electrical power is switched off;

- Failure to comply with the above recommendations may result in serious injuries and risk of death;
- Risks during equipment cleaning process.

 ATTENTION!

- Use the necessary PPE (Personal Protective Equipment) (gloves and protective glasses) throughout the cleaning process.

 CAUTION - RISK OF INJURY!

- Be careful during the cleaning process, as the doors may close in certain situations. The impact of the doors with the human body can cause bruises and even fractures.
- The side doors for accessing the equipment and the top covers are made of glass, so be careful during cleaning not to force them excessively.
- In the cleaning chapter of this manual, suitable products for equipment cleaning are listed. The use of correct products protects both the equipment and the skin of the person performing the cleaning.
- Danger of height during sensor cleaning.

6. Features and operation

The equipment is the first dFlow access controller that perfectly fits into the Free Flow concept. This concept represents a new way of perceiving access control, as the doors remain in the normally open position, whereas traditional equipment has their barriers in the normally closed position. It is this paradigm shift that sets a Free Flow gate apart from those previously available.



ATTENTION! : The dFlow is a configurable device and can be supplied with the option of normally closed doors.

Although it may appear that the dFlow equipment is always open, it does have doors. They are activated only when one or more unauthorized persons, including tailgaters, attempt to pass through the equipment. The closing system is quick and progressive, performed by the unique motor control assembly, innovative sensing, and sophisticated algorithm. This results in a very pleasant and fast experience for authorized users and brings unprecedented levels of security to the establishment.



The technology developed in Brazil by Digicon detects with high precision users moving in any direction within the equipment. This precision comes from the innovative sensing system, which can be compared to virtually unlimited traditional infrared sensors, thus allowing the doors to remain open for authorized users and close for unauthorized ones.



Luminous windows composed of LEDs accompany users during the journey inside the equipment. They can be of different colors for each type of user group. In a school application, for example, students may belong to the green group, educators to the yellow group, and parents to the blue group. Users who do not have validation will be shown in red. The flexibility of dFlow allows other user groups to be identified by an extensive range of colors, thus providing more information to the access system.



The dFlow accepts the main traditional identification technologies, including barcode, QR code, RFID, MIFARE, and fingerprint biometrics. Integration with these technologies follows the standards used in traditional access control equipment.



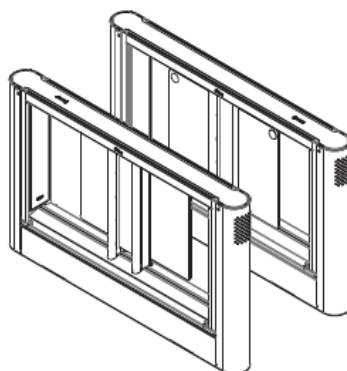
New biometric technologies that are emerging, such as facial recognition, iris recognition, and "finger on the fly," are also supported by dFlow. These new concepts offer a faster and contactless experience with the equipment, further highlighting the Free Flow concept.

7. Models

There are three types of models for the dFlow equipment. All of them use the same sensing system, but each model has a different passage width.

I. Model 500

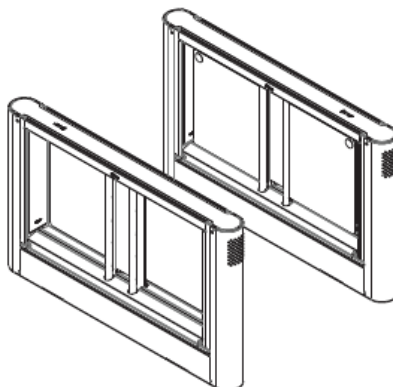
In the model 500, we have a passage width of 520 millimeters. With this measurement, we can accommodate non-simultaneous bidirectional flow.



II. Model 900

In the model 900, we have a passage width of 920 millimeters. With this measurement, we can accommodate simultaneous bidirectional flow along with access for users with disabilities (PWDs - Persons with Disabilities).

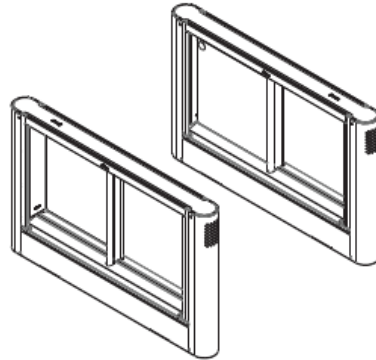
 **ATTENTION!** - The model 900 can be configured with centralized doors.



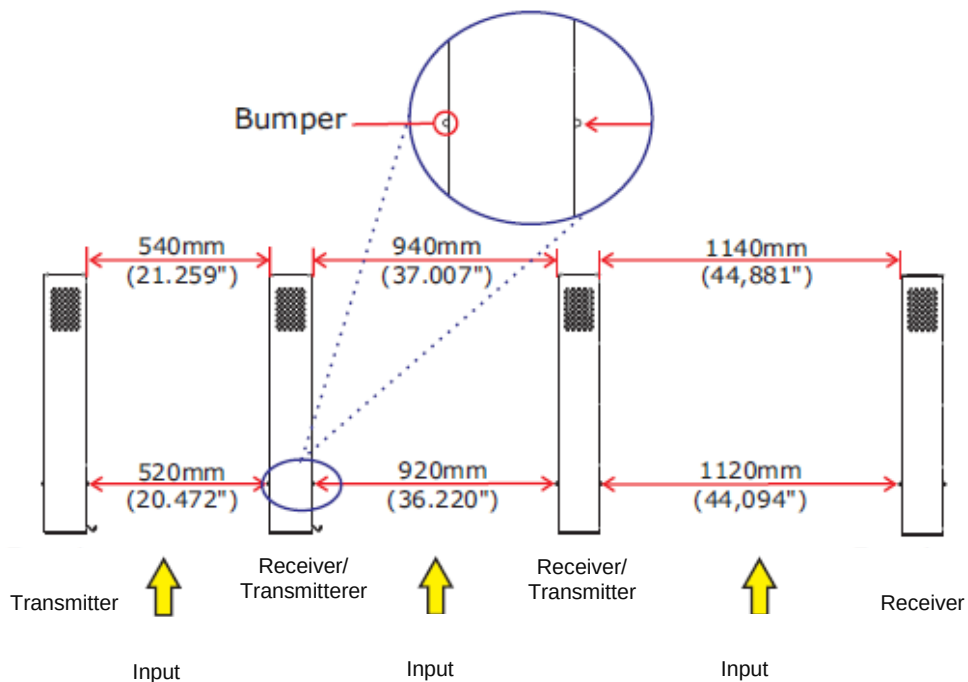
 **ATTENTION!** - Digicon complies with the ABNT NBR 9050 Accessibility standard for buildings, furniture, urban spaces, and equipment.

III. Model 1100

In the model 1100, we have a passage width of 1120 millimeters. Exclusively in this model, the doors are centralized, which does not affect the bidirectional flow or the possibility of access for users with disabilities (PWDs - Persons with Disabilities).



Each passage of the dFlow has 2 bumpers (left and right) which function to protect the equipment against mechanical shocks. The 10 mm bumpers each reduce the effective width of the passage from 1140/940/540mm to 1120/920/520mm only in their operating region.



8. Installation

⚠ CAUTION - RISK OF DEATH! Allow only qualified personnel to install this equipment. Installation must comply with all local rules and regulations.

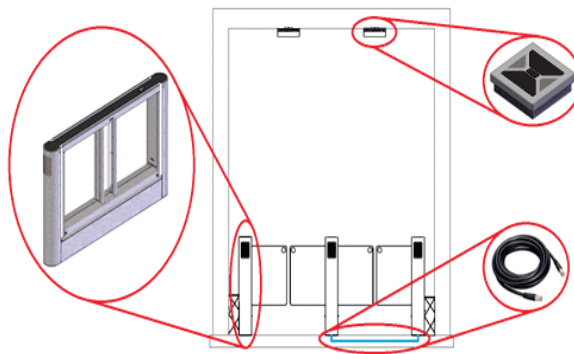
8.1. Installation Location

The installation location must meet the requirements listed in the Work Plan document in order to receive the equipment installation. It contains all the necessary information for the product to be installed correctly and meet all customer expectations. Attached to the document is the checklist of installation requirements, which must be filled out and signed by the customer and documented by the installation company.

⚠ ATTENTION! - Evidence of compliance with installation requirements must be sent for technician analysis. This can be done through photos and videos, providing clarity in the information.

8.2. Packaging Contents

Before starting the installation, it is very important to perform a checklist of the received items. This helps prevent future stoppages during installation due to lack of materials. If any item is found to be missing, please contact the company responsible for the sale.



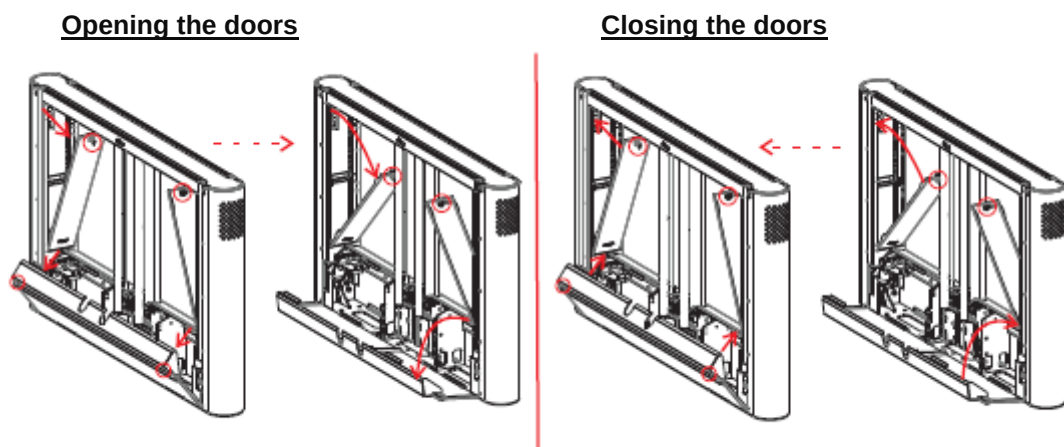
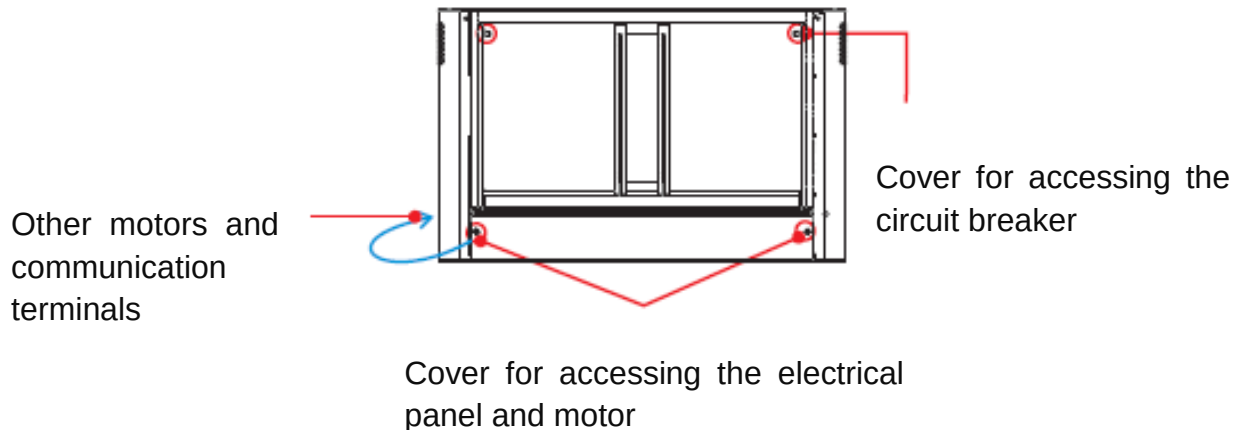
⚠ CAUTION - RISK OF INJURY! Use two or more people to move/install the equipment. Overweight may cause damage or injury to the person attempting to perform the procedure alone.

8.3. Access to dFlow

Each module of the equipment has four access covers accessible via key, which are:

Side covers: Provide access to the circuit breaker, card collector, motor board power supplies, and selector switch.

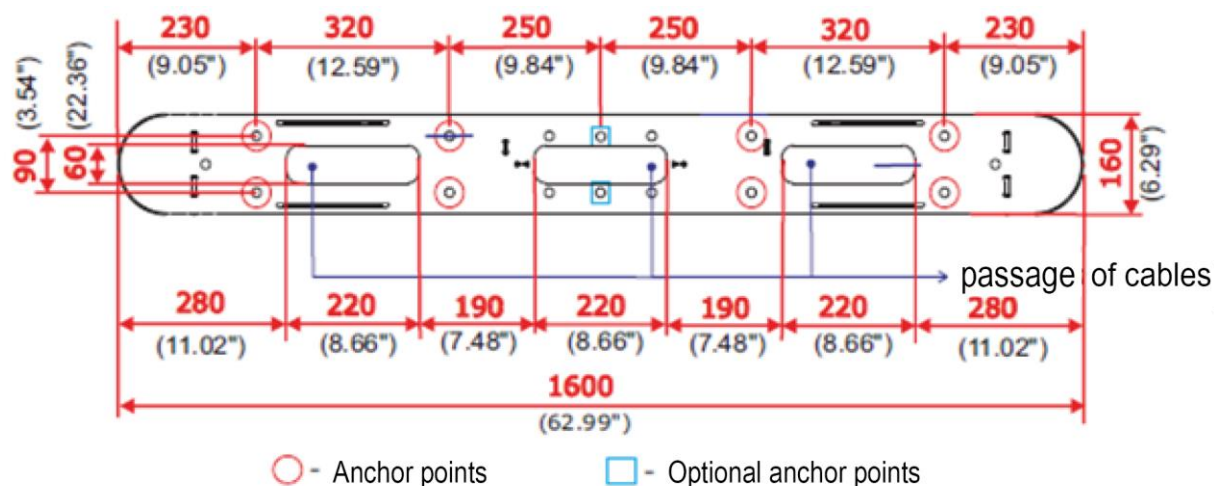
Lower covers: Provide access to the motors, control board, CPU, terminals, and integrator area.



⚠ CAUTION - RISK OF DEATH! - Ensure that the circuit breaker is in the OFF position. This prevents the equipment from being accidentally energized during installation.

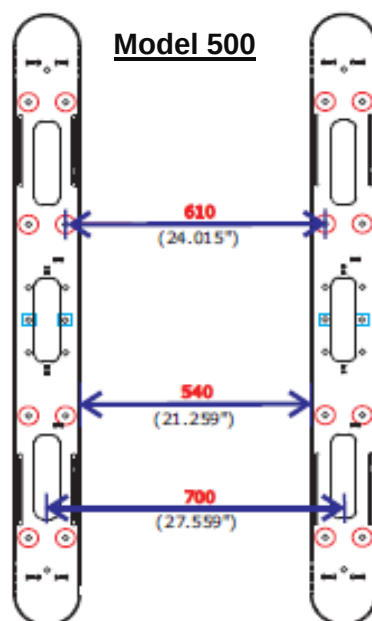
8.4. Drilling and Anchoring

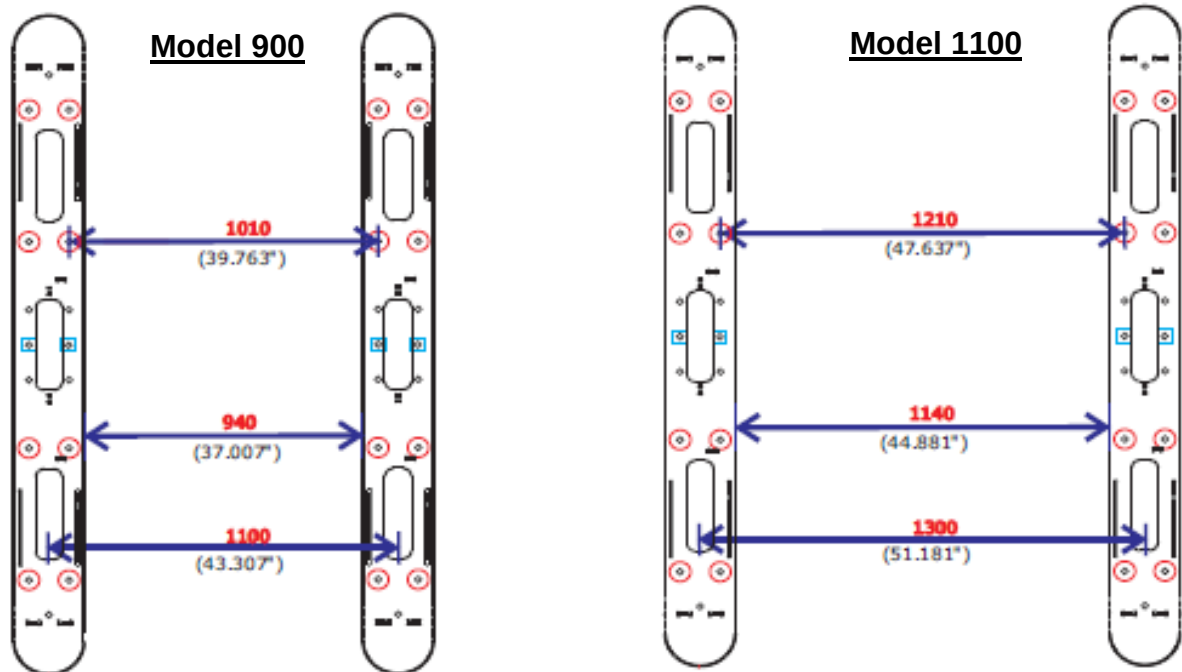
To secure the equipment to the ground, we must prepare the appropriate drillings according to the measurements shown below:



⚠ CAUTION - RISK OF INJURY! Ensure that the installation surface is firm and level. This will ensure that the doors remain aligned and the sensor performs better.

Position the equipment or templates (item 11.8) in the appropriate installation location and verify that it corresponds to the model purchased by the customer. Below are the measurements according to the models:

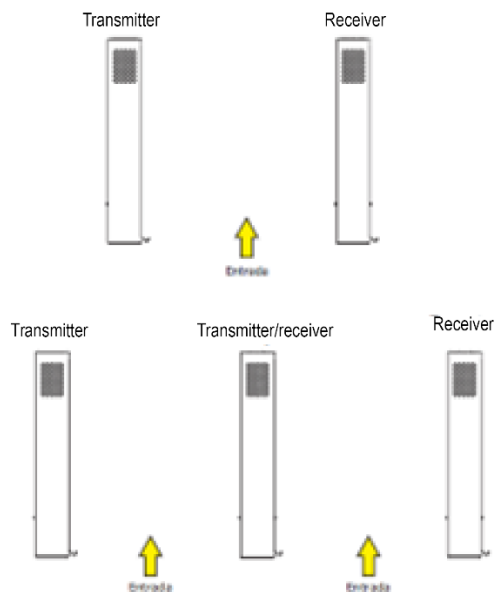




With the layout positioned and the measurements confirmed, mark the drilling points on the ground, remove the templates, and drill according to the type of anchor chosen (mechanical or chemical).

⚠ ATTENTION - Digicon recommends the use of chemical anchor bolt systems. Check the manufacturer's information to perform the chosen anchoring.

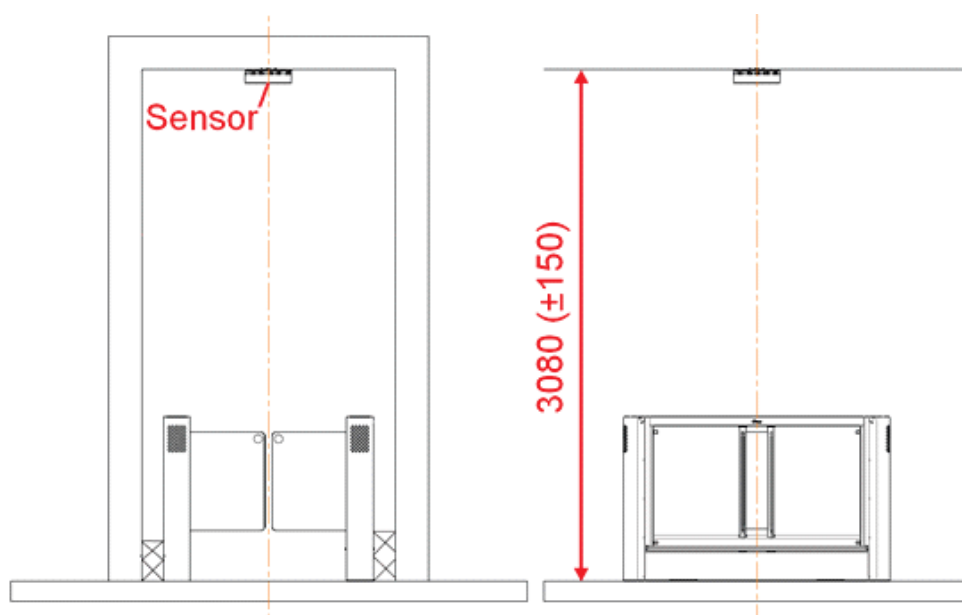
Ensure that the positioning of the modules is in accordance with the examples below:



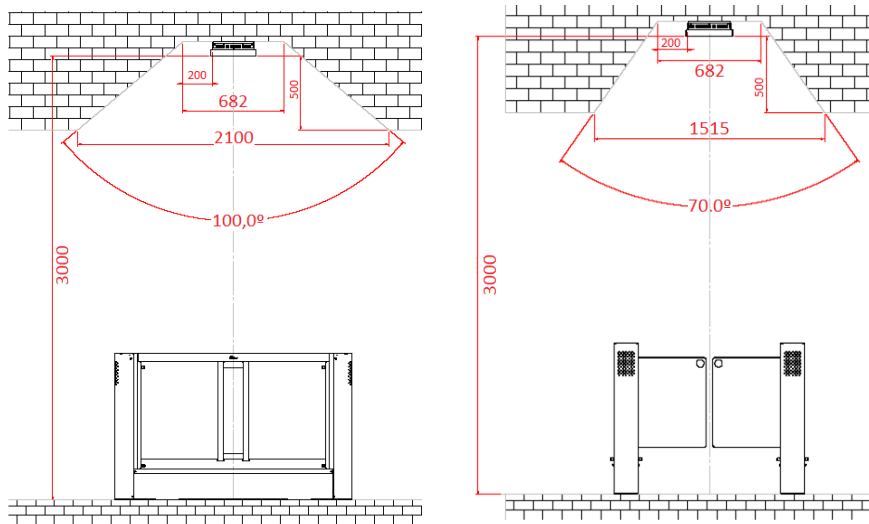
⚠ ATTENTION - In order to differentiate the modules, we highlight that the receiver has a CPU and control board, while the transmitter only has terminal block B2 on the bottom of the product.

8.5. Fixing and energizing the sensor

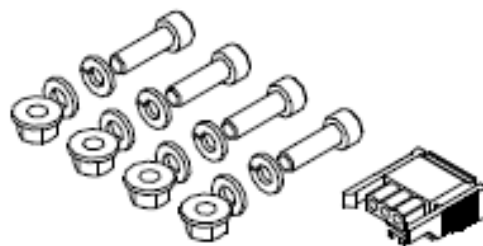
To properly fix the sensor, verify that the installation references are in accordance with the specifications below



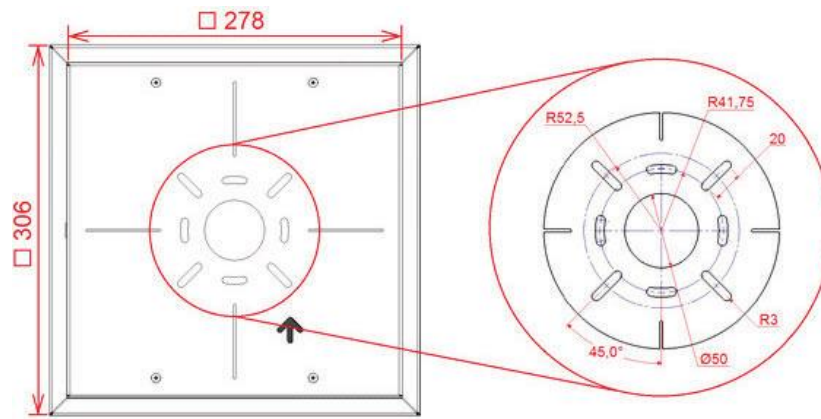
In places where there is a lowered ceiling, an opening should be maintained as in the next image.



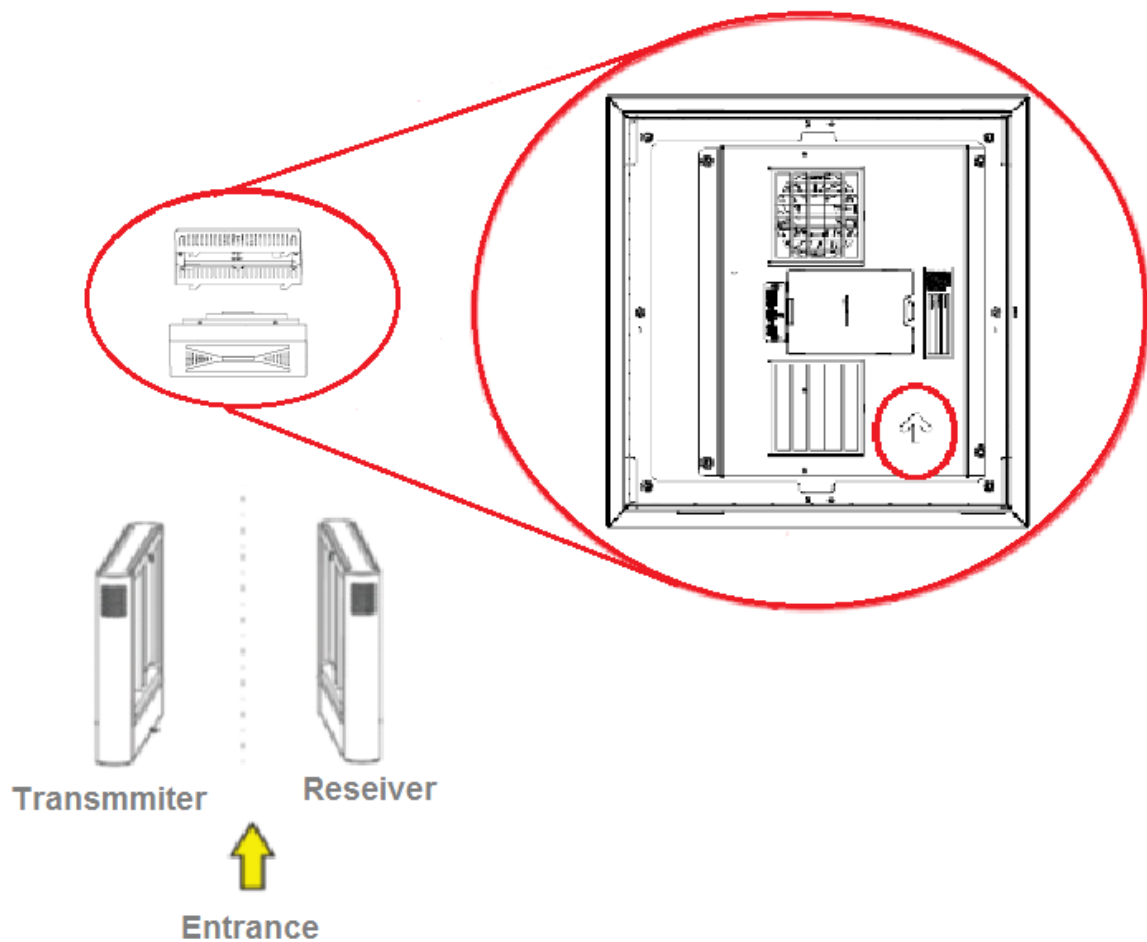
Inside the set, a kit containing screws and the connector used to power the sensor is sent. Use these items to fix it to the infrastructure arranged by the customer.



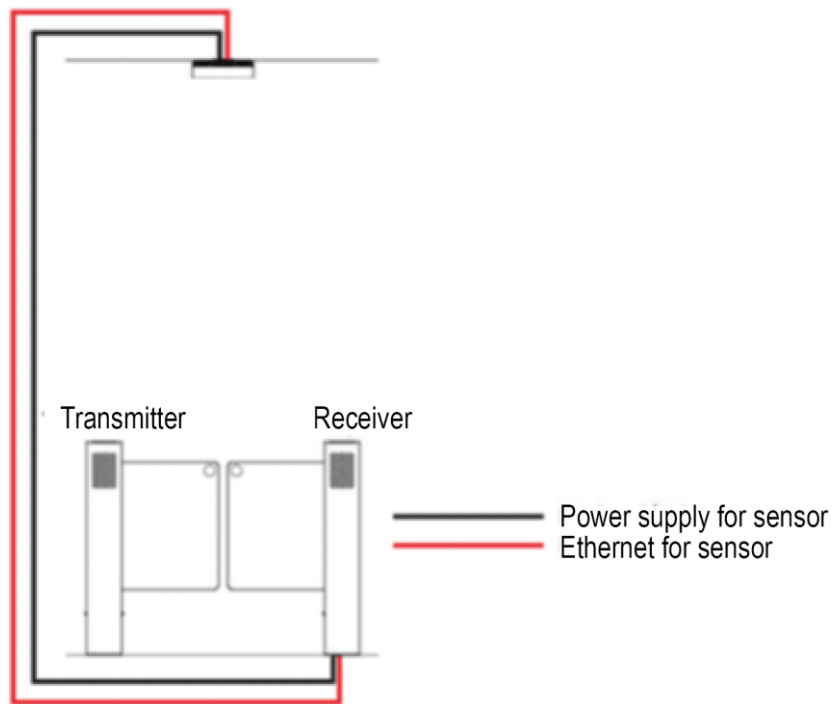
⚠ ATTENTION - If the provided mounting system does not meet the requirements of the location, it is possible to replace it with another as long as it does not interfere mechanically with the sensor.



At the time of installation, it is important to respect the proper positioning of the sensor. The arrow indicates the direction of entry of the equipment.

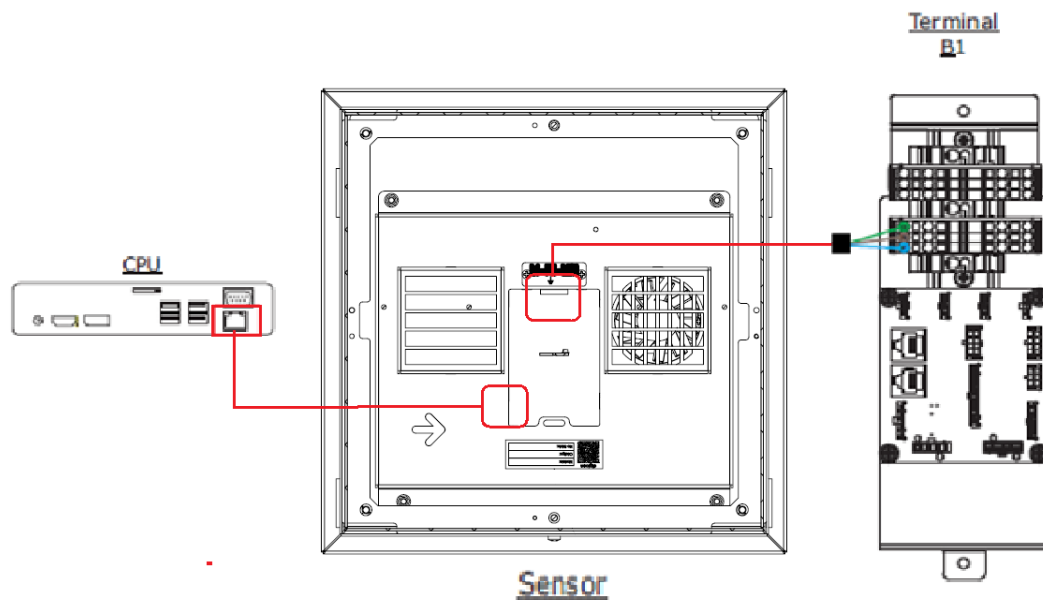


With the sensor properly fixed, connect the cables that interconnect the sensor with the respective associated passage.



The Ethernet connection between the sensor and the CPU should be connected between the native interfaces.

The power supply must be provided from the AC terminals of terminal B1.



8.6. Routing of interconnection cables

After completing the fixation of the sensor and modules, proceed to interconnect the modules with the cables provided with the product. In total, there are five cables coded as follows:

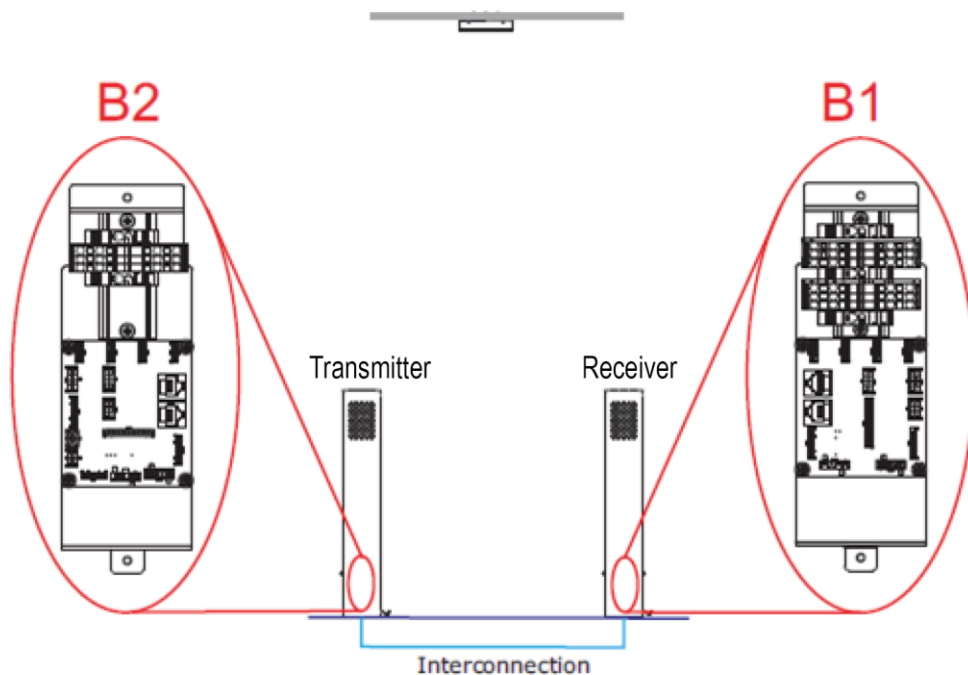
037.13.516 – AC power

037.13.508 – 5VDC power

037.13.495 – Peripheral communication

037.13.507 – Pictogram communication

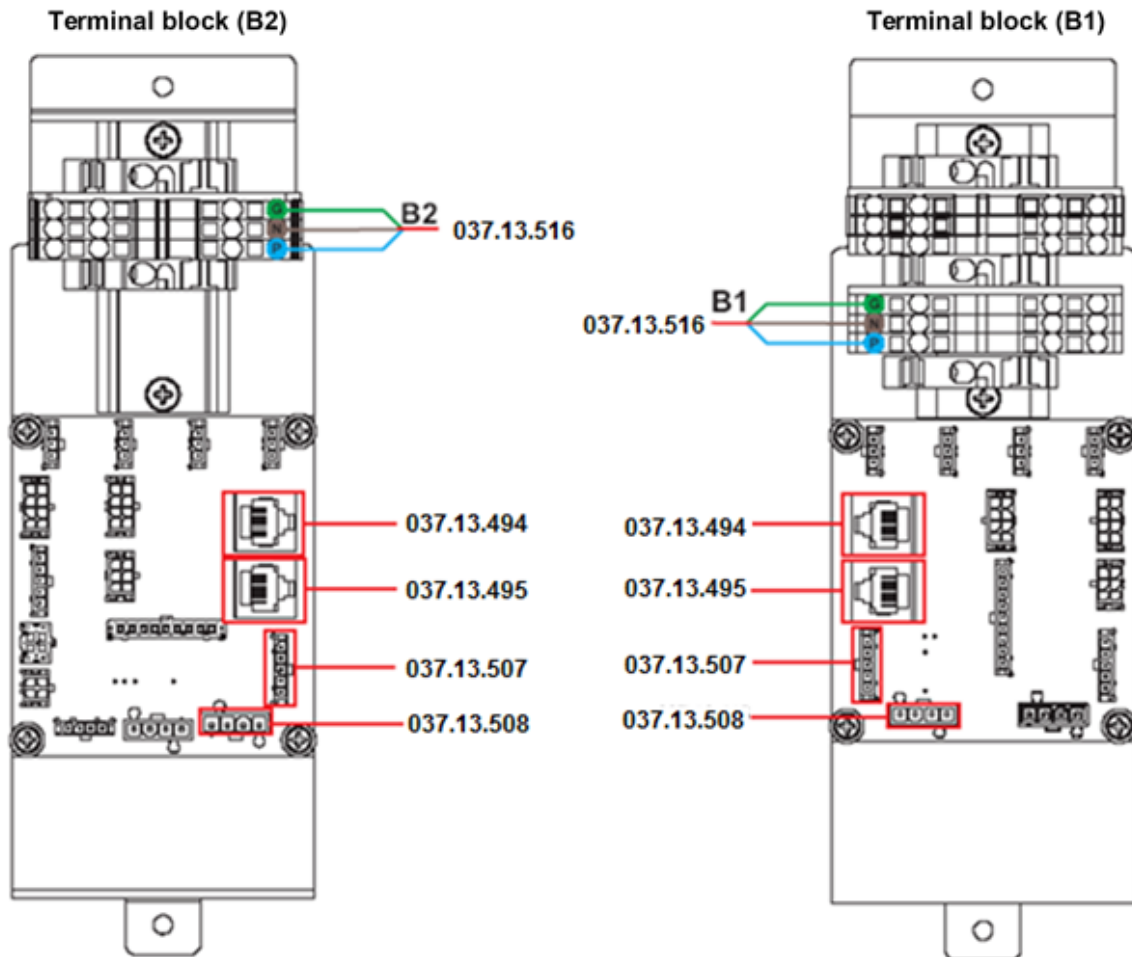
037.13.494 – Signal communication



The interconnection must be made between the receiver and transmitter modules, that is, between terminal B1 and B2 and interconnection boards.

- ⚠ **ATTENTION** – Only the cable with code 037.13.516 should be connected respectively between (B1 and B2), the other cables should be connected between the boards regardless of the sides (R or T)
- ⚠ **ATTENTION** - Digicon provides interconnection cables with a length of 4 meters. The depth of the conduits must be dimensioned so that the cables are sufficient.

⚠ CAUTION - RISK OF INJURY! Pay attention to the identifiers of each cable route. Reversed connections can impair the operation of the equipment.



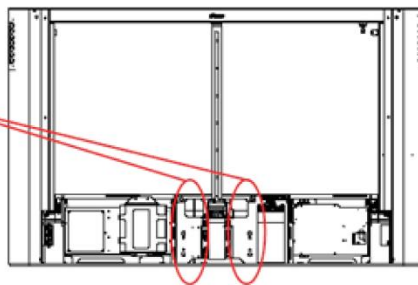
⚠ CAUTION - RISK OF INJURY! When routing the interconnection cables between the modules along the infrastructure, be careful to avoid damage. Broken cables can impair the operation of the equipment.

Accommodating excess cables

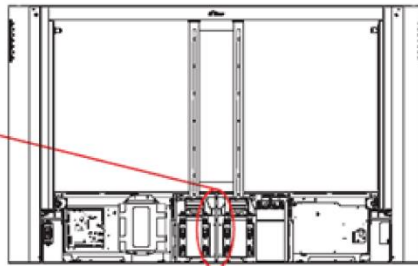
In the case where excess interconnection cables of 4 meters will be left inside the equipment, insert them into the designated locations below:

For R/RT models: Divide the excess cables between the two modules and place them between the space of the motors.

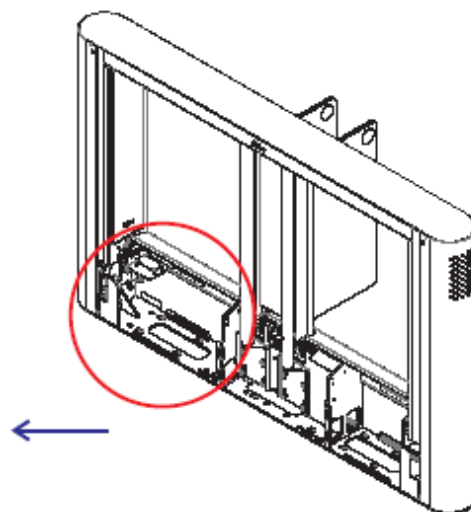
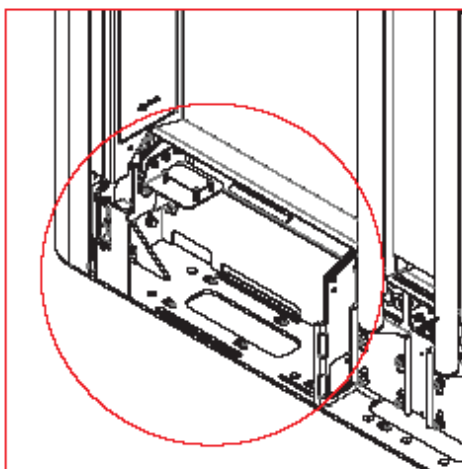
dFlow with one port, two cable
pass-through spaces



dFlow with two ports, one cable
pass-through space



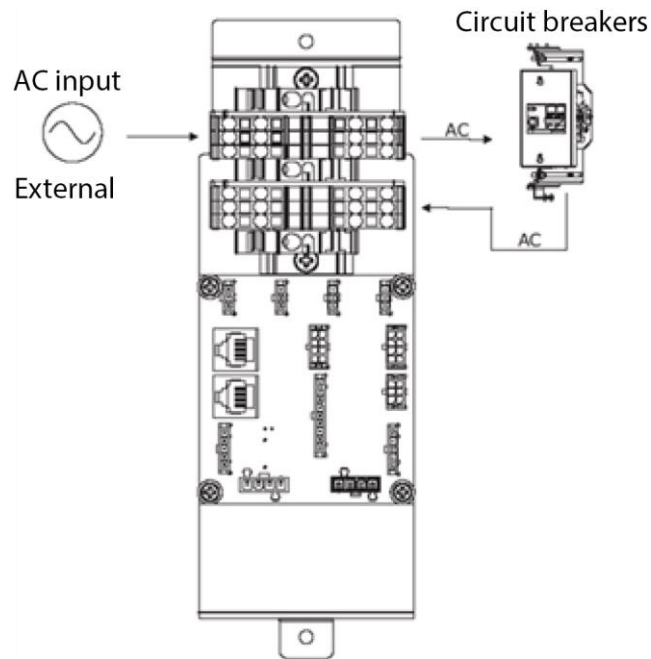
For T modules: insert the cable into the free space as shown in the image below.



8.6. Connection of power supply and external network

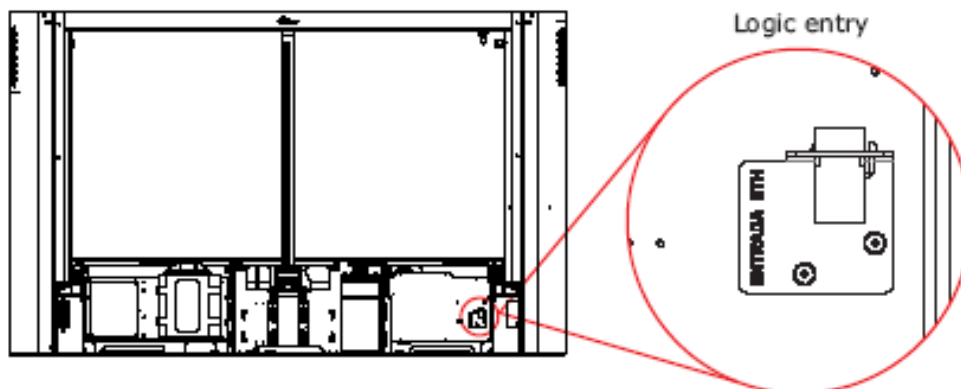
To power up the equipment, the external AC power supply should be connected to specific terminals 1, 3, and 5 of terminal block B1. The remaining terminals on the upper part are power supplies protected by the equipment's circuit breakers.

⚠ CAUTION - RISK OF DEATH! Make sure that the cables provided for the connections meet the specifications of the manual (Work Plan).



⚠ ATTENTION! The green terminal is reserved exclusively for grounding, therefore, do not insert alternating signals into these connections.

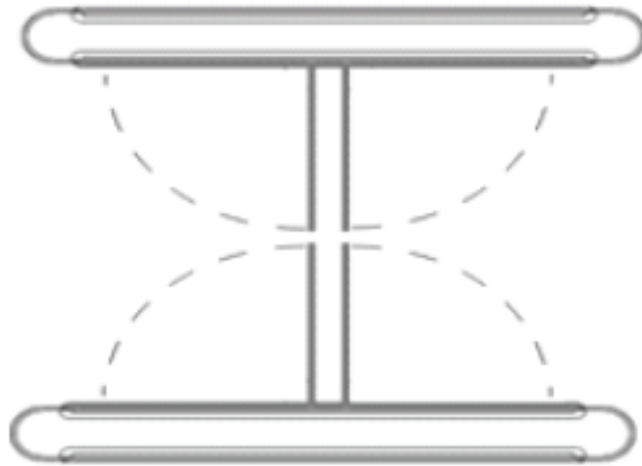
For the logic part, the network cable should be inserted into the slot located in the tray next to terminal block B1 as shown in the image below.



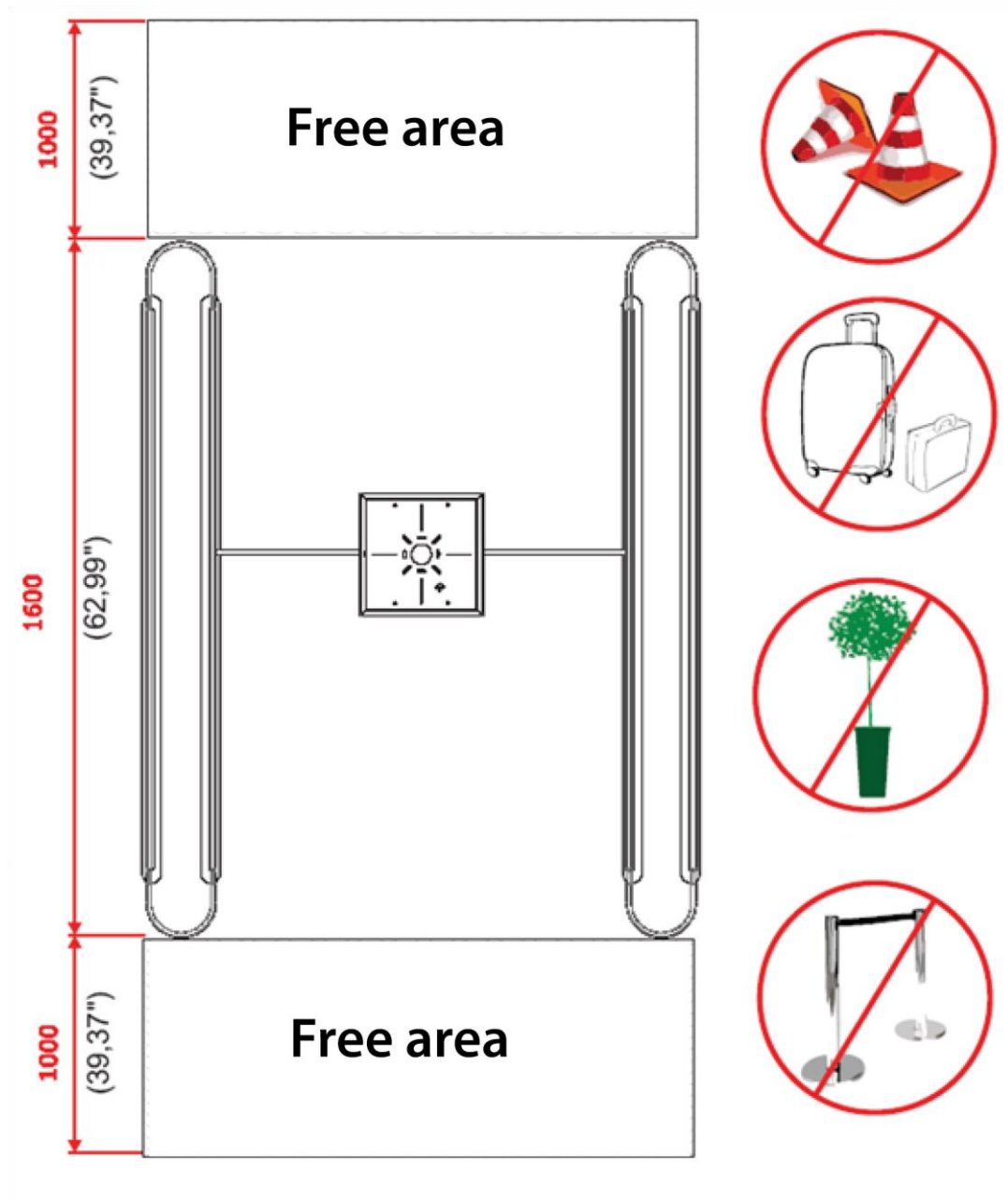
9. Powering up the equipment

9.1. Important checks

- a) Check if the ports are free to move along their path.

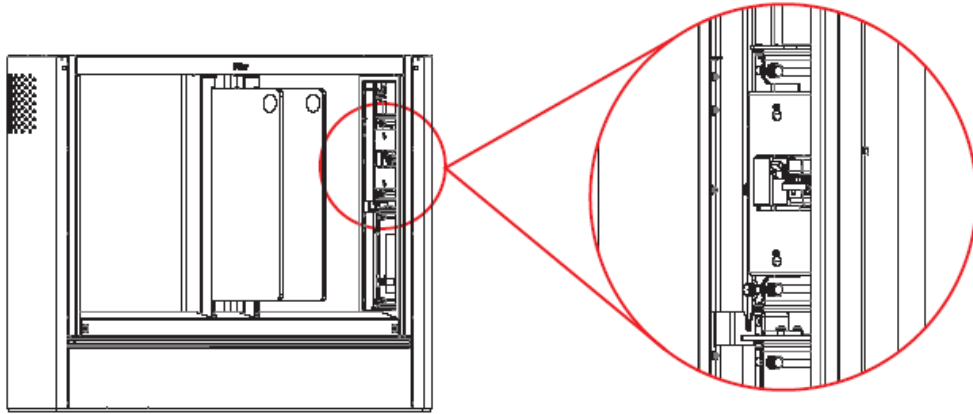


- b) Using a multimeter set to continuity mode, check if the internal AC power supply of the equipment does not have a short circuit.
- c) Also, check continuity between the interconnection cables between terminal blocks B1, B2, and interconnection boards.
- d) Ensure that the mandatory free space is being respected.



9.2. Arming the circuit breaker

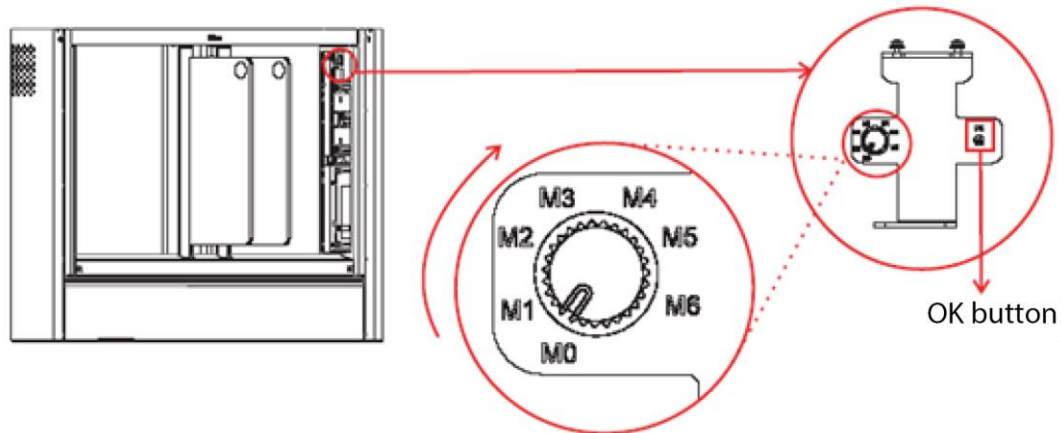
After the checks have been performed, the equipment can be powered up for the first time. Access the side panel that provides access to the circuit breakers and arm them.



Immediately after turning on the equipment, wait a few minutes for the application to start running on the equipment. When the doors open and the front pictogram indicates an open passage (<), the equipment is ready to receive the initial configurations.

10. Configuration via selector switch

Many of the dFlow adjustments and settings are conveniently and easily accessible. Through the selector switch, functions such as validation and calibration of the upper sensor, centering of the doors, exchange of operational states between entrance and exit, and changing the color of the upper LEDs can be performed. To activate the functionalities, rotate the switch and press the OK button.



Position M0 - Normal operation

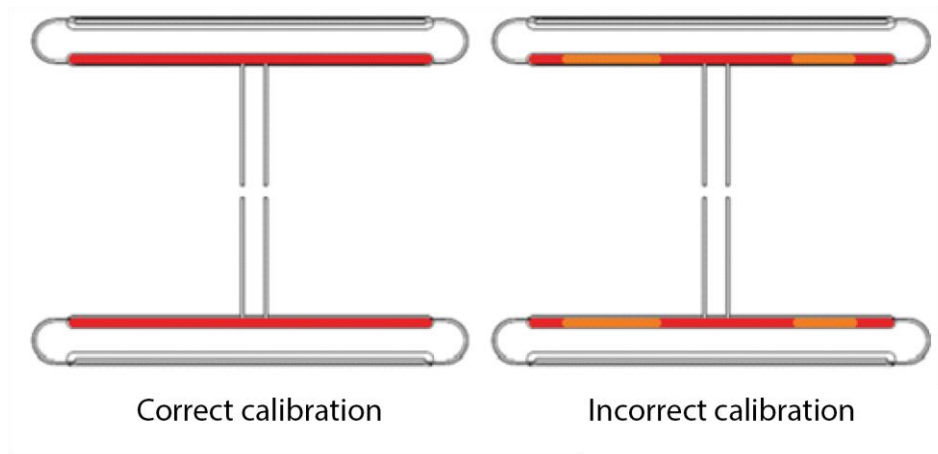
- Pressing the OK button briefly will return the equipment to its normal state.

Position M1 - Sensor calibration validation.

This function is important to verify the quality of the calibration being used. When the OK button is pressed briefly, all LEDs light up in red. Move away from the gate and make sure there are no objects in the gate region as per specifications.

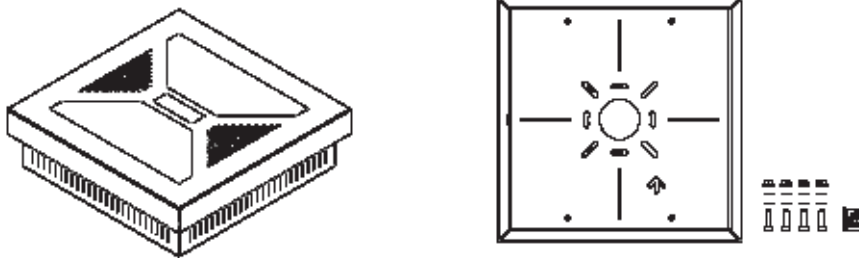
- ⚠ ATTENTION** - This functionality has a time limit for execution. After about 1 minute, the equipment will return to its normal state. If you do not want to wait for the time limit, you can exit the function by returning to position M0 and pressing the OK button briefly.

If the orange color is identified on the LEDs, it means that the calibration is not correct. An ideal calibration is identified by the static red color, meaning the orange color is not triggered in the calibration validation process.



In cases of incorrect calibration, perform the sensor calibration procedure.

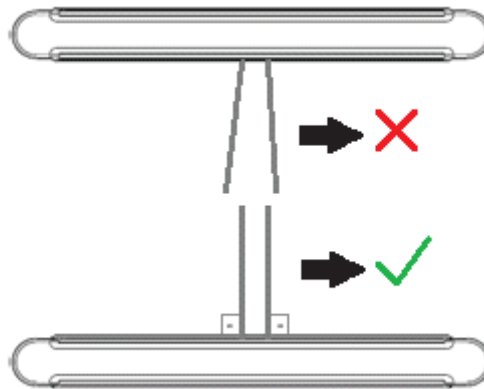
Position M1 - Sensor Calibration



Sensor calibration is an important feature for the proper operation of the equipment. This procedure is applied when there are changes in the installation environment and/or when incorrect calibration is identified. Pressing the OK button for three seconds will start the calibration process. Remember to move away from the equipment to avoid affecting the process. The progress of the step can be visualized on the LEDs by the red color. After completion, the equipment will return to its normal operation.

Position M2 - Door Calibration

The door calibration procedure is applied when we identify that the doors are not orthogonal to the gate, that is, they do not make a 90° angle with the module.



This procedure is divided into two steps: checking the door limits and centering the doors. Briefly pressing OK will start the process of checking the limits. After the completion of the first step, adjust the doors to the orthogonal position to the module and press the OK button again. The progress of the two steps can be visualized on the LEDs by the purple color. After completion, the equipment will return to its normal operation.

Position M3 and M4 - Input and output operational states.

The operational states can be configured in three ways, which are:

- Controlled = Only accepts passages with the presentation of a valid credential. It is represented by the color chosen in the procedure of position M5 and with a "<" in the corresponding pictogram.
- Free = State that discards the use of credentials to access. It is represented by the color green.
- Closed = State that prevents passage in the signaled direction. It is represented by the red color in the side LEDs and with an "x" in the corresponding pictogram.

By pressing the OK button in position M3, the operational state of the entrance is changed. If we perform the same procedure in position M4, the operational state of the exit is changed. Press the OK button until you reach the desired state.

⚠ ATTENTION - If the equipment is configured in unidirectional mode, changing states in the output direction will have no effect.

Position M5 - Operation colors

It is possible to choose the color used to be displayed in controlled mode. The color options are: yellow, blue, orange, turquoise, white, purple, pink, olive, and brown. Press the OK button until you reach the desired color.

Position M6 - Protection levels

The equipment's safety levels aim to prevent collisions between door leaves and users. This control occurs through delimited regions, which act on the door activation control according to the rules of the selected level. The upper LEDs identify the selection according to the level.

- Red (Level 0): No protection
- Orange (Level 1): Only valid users
- Yellow (Level 2): Any user
- Green (Level 3): Any object



Press the OK button until you reach the desired security level.

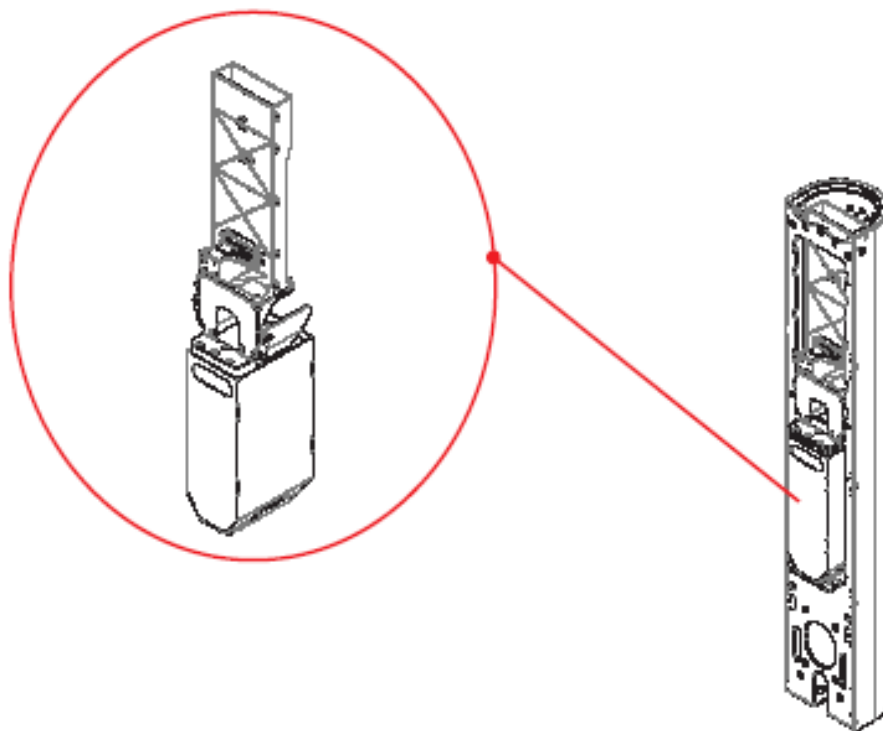
11. Optional items

In addition to being compatible with most access control technologies, Digicon also offers a range of optional items that allow enhancing and customizing the operation of dFlow to meet the customer's needs. The description of each item can be viewed below:

11.1. Card collector

The card collector kit with a ballot box features a device for collecting, retaining, and collecting cards or badges. It is ideal for places with visitors or occasional users. The kit consists of a nozzle, a solenoid-activated retention device, and a storage ballot box. The ballot box has a capacity to store approximately 50 cards.

The figure below shows the items that are part of the card collector kit.



11.2. Display



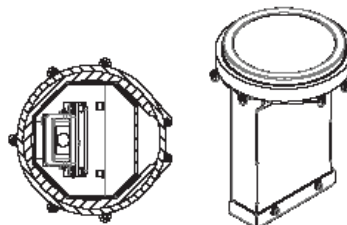
The LCD display features Full HD resolution and displays informative images of the equipment's actions and operations. These images are configurable, meaning they can be customized according to the customer's needs.

Below are some existing patterns:



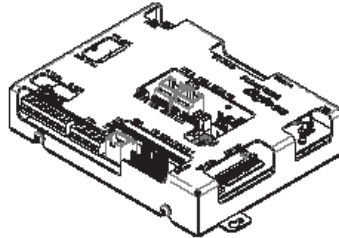
11.3. Barcode reader

It features a sensor with a resolution of 844 x 640 pixels operating at 60 FPS that reads barcodes and QR codes. This optional is widely used for scanning boarding passes at airports.



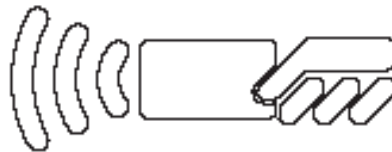
11.4. Access control module - ACM

This module is a technology developed by Digicon with the aim of maximizing the task of integrating access control systems that require processing power, flexibility in the choice of technologies, and agility in data manipulation and transfer. The following items are the options that can be configured together with the ACM:



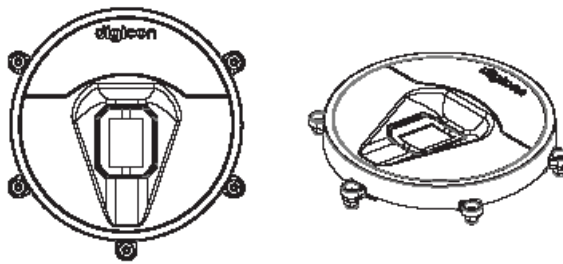
11.5. Antennas

The antennas are used for card reading and have a wide application in commercial and business environments where controlled flow of people is desirable. The ACM already has integration with MIFARE and RFID technologies and is available to integrate with other antennas according to the needs of the customer/integrator.



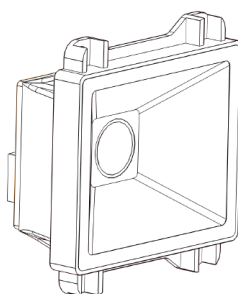
11.6. Biometrics

The biometric sensor is a device designed for identifying individuals through the scanning of fingerprints. Systems that use this type of identification are more secure and convenient, as they do not need to carry another form of identification for validation.



11.7. Barcode reader

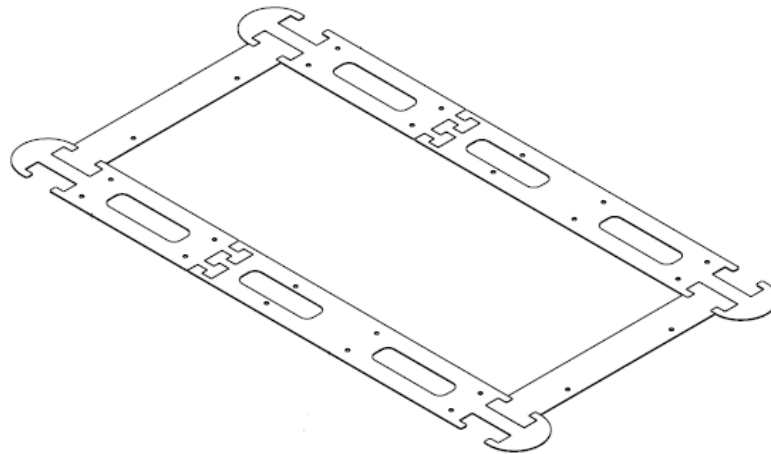
It features a sensor with a resolution of 640x480 pixels that reads barcodes and QR codes. This option is widely used for scanning boarding passes at airports.



11.8. Installation template

MDF template that helps with product installation, bringing precision and agility to the team. With specific sizes for each passage width, they are available under the following codes:

- 070.15.338 500 Passage
- 070.14.048 900 Passage
- 070.15.337 1100 passage



 For more information, please contact Digicon's sales team.

12. Optional Modules

In order to facilitate configuration and enhance the performance of your equipment, Digicon has developed optional modules with exclusive functionalities. The description of each item can be viewed below:

12.1. dFlow Configurator Module:

The dFlow Configurator module provides easy configuration of the equipment, as it offers a web interface that can be accessed from any device within the network. Registered users can perform some adjustment actions and operating modes among others without the need to go to the equipment

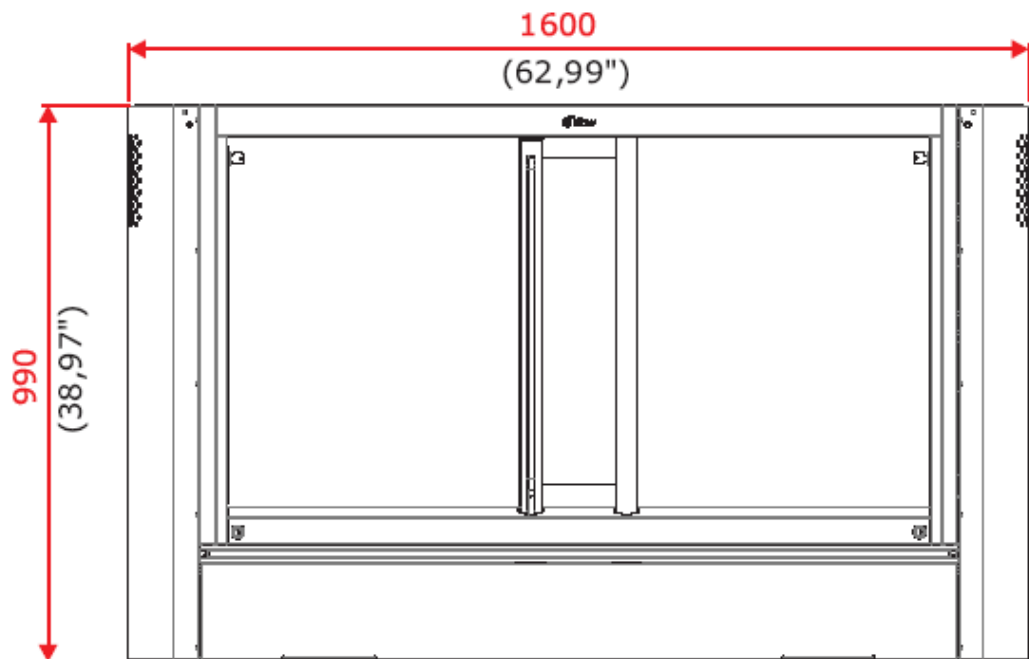
12.2. Artificial Intelligence Module

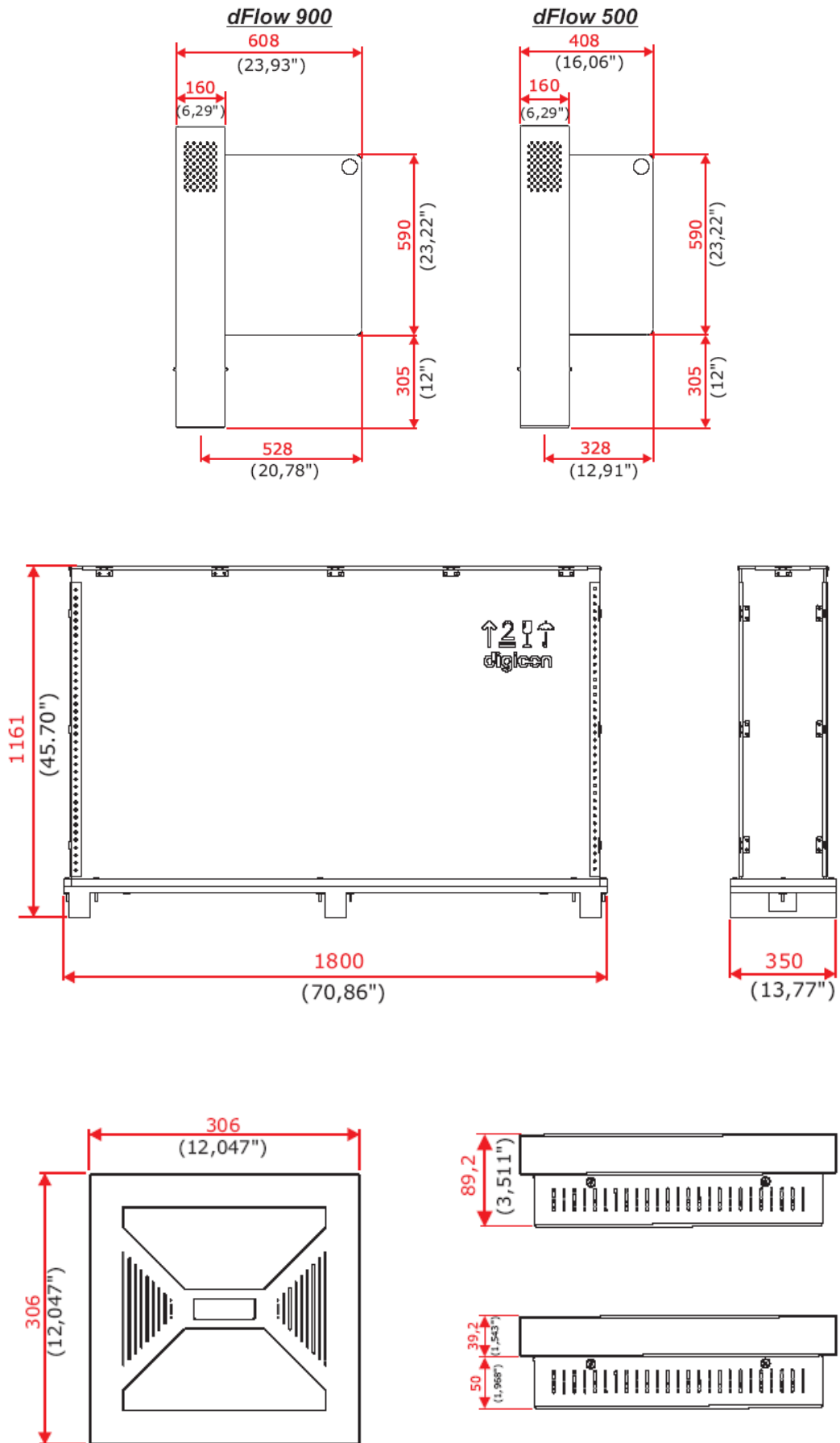
The Artificial Intelligence module brings an additional layer of security to the product. Through machine learning, this module can identify objects, allowing the passage of items without the risk of the dFlow colliding with users and preventing unauthorized entries.

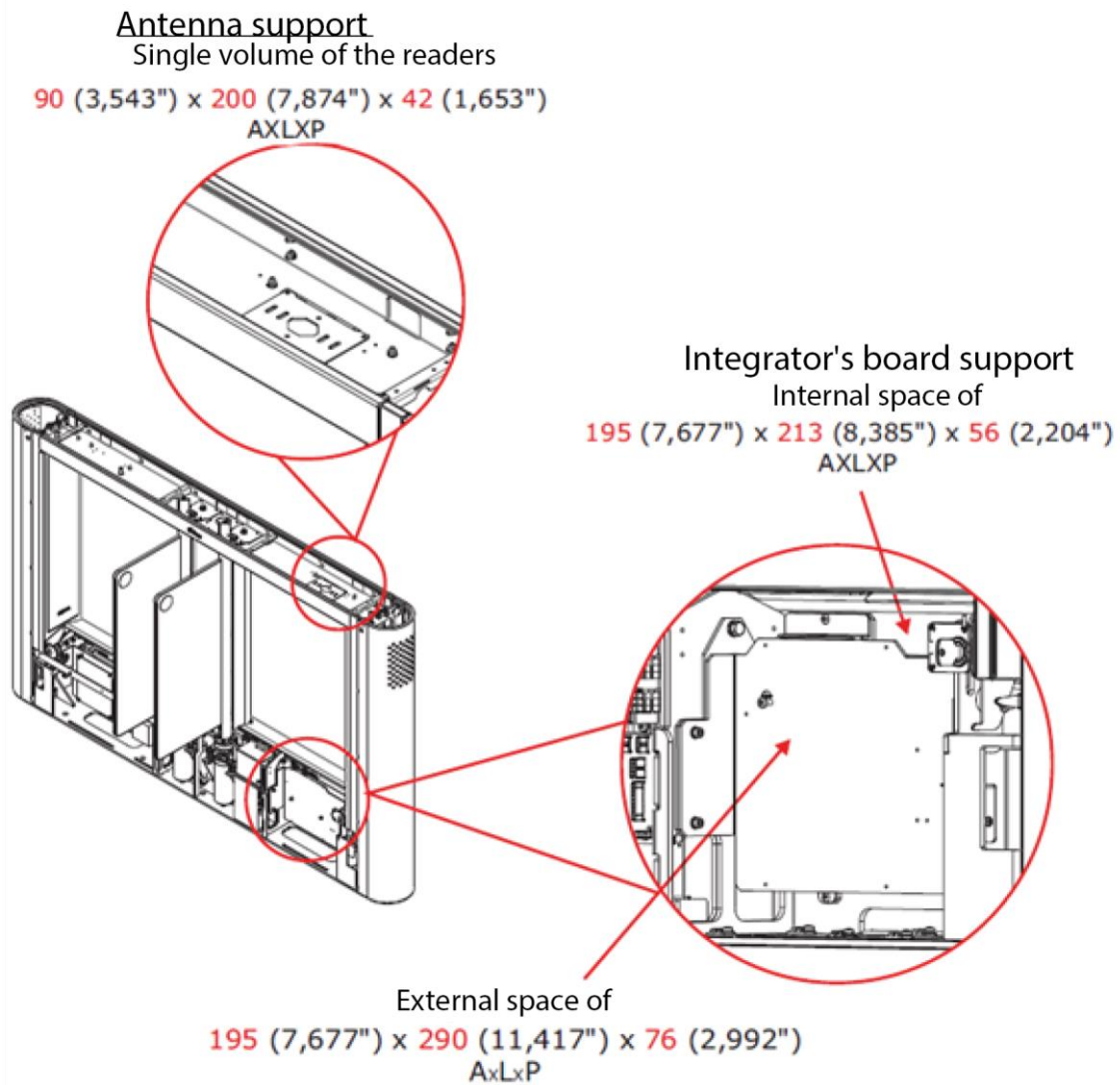
⚠ For more information, please contact Digicon's sales team.

13. Technical Specifications

13.1. Dimensions







⚠ Total space (internal + external) of 195mm (7.677") x 213mm (8.385") x 132mm (5.196") without intermediate tray.

14. Other information

Technical Data	Features
Power Supply	100 - 240 Vca (Automatic selection)
Frequency	50 - 60 Hz
Average door open/close time	1 second
Operating temperature	10°C e 40°C
Approximate weight	190 kg per module

Consumption:

Initialization	140 ~ 150 W
Operation (idle)	120 ~ 140 W
Operation (two doors in motion)	120 ~ 160 W
Operation (two doors obstructed)	160 ~ 200 W
Operation (four doors obstructed)	160 ~ 280 W

15. Tool List:

- Socket wrench metric 7 - 8 - 9 - 10 - 11 - 12 - 13 - 14 - 17 - 19 mm.
- Hex socket metric 5,5 - 7 - 8 - 10 - 11 - 12 - 13 - 14 mm with ratchet 1/4".
- Allen wrench set metric 3 - 4 - 5 - 6 - 8 - 10 mm
- Screw driver 1/8 "x3" e 1/4 "x4"
- Phillips screwdriver 1/8 "x4", 3/16 "x6", 3/16 "x1 1/2" e 1/4 "x5"
- Universal pliers
- Pliers for RJ-45 connector
- Multimeter
- Level
- Torque wrench
- Electric drill
- Power drill metric 6 - 8 - 10 - 12 - 14 mm (*)
- Measuring tape (*)
- Pendulum (*)
- Tapes end markers (*)
- Cutter
- Laptop with Ethernet interface, Google Chrome, Putty, FileZilla or MobaXterm..

Optional tools

- Laser level (*)
 - Power Screwdriver
 - Soldering
 - Atmel- ICE Debugger and Programmer
- (*) Required only during the installation phase

16. Preventive Maintenance

Reserve all maintenance services for qualified technical professionals only.

Action	Frequency
Check the operation of the 3D sensor by analyzing the generated video files.	1x / 6 months
Calibrate the barrier.	1x / 3 months
Calibrate the doors.	1x / 3 months
Analyze the operation of the doors, looking for any noises, heavy mechanisms, and non-standard activations.	1x / 6 months
Analyze the activation of the lateral and upper LEDs of the equipment.	1x / 6 months
Analyze the activation of the entry and exit pictogram.	1x / 6 months
Analyze the activation of the buzzer through validations and invalid inputs.	1x / 6 months
Check the 5V and 12V voltages at the outputs of their respective power supplies.	1x / 6 months
Check the 24V voltage at the power supplies that feed the motors.	1x / 6 months
Check the emergency activation of the equipment.	1x / 6 months
Check the operation of the mechanical brake of the doors.	1x / 6 months
Check the operation of the biometric reader(s).	1x / 6 months
Check the operation of the contactless card reader(s).	1x / 6 months
Check the operation of the card collector and urn.	1x / 6 months
Check the operation of the barcode reader(s).	1x / 6 months
Check the operation of the display.	1x / 6 months

(*) = If installed on the equipment.

Maintenance Log

[illegible]

17. Cleaning

17.1. Maintenance and conservation of the doors:

Fingerprints: Use a soft cloth dampened with water, soap, or neutral detergent, then lightly polish with a soft dry cloth. Stains that may appear after drying water with impurities: Use a soft cloth dampened with distilled or ionized water, then dry thoroughly with a soft dry cloth. Greases and oils: Use a soft cloth dampened with isopropyl alcohol. Be careful not to spread the stain. Every six months, check the door support fixtures for tightness. Never use solvents, chemicals, bleaches, household cleaning products, sharp or abrasive objects to clean the equipment. Polycarbonate is sensitive to abrasion, so remember this when cleaning it.

17.2. Maintenance and conservation of the passage control sensor:

Clean the lenses at least once a month. Depending on the environmental conditions and the application, adjust the cleaning frequency according to the needs. If cleaning is done regularly, water alone is sufficient. Do not use chemicals, bleach, or household cleaning products. If there is heavy dirt accumulation, apply mild soap and use a soft cloth or soft-bristled brush. Use mild soap when and if necessary. For heavier cleaning, use isopropyl alcohol with the help of a soft cloth. The lenses are sensitive to abrasion, so remember this when cleaning them. Make sure to properly clean the plates, as soap or alcohol residue can stain the lenses.

17.3. Maintenance and conservation of the dFlow (glass and stainless steel plates):

Clean the equipment at least once a month. Depending on the environmental conditions and the application, adjust the cleaning frequency according to the needs. If cleaning is done regularly, a dry cloth alone is sufficient to remove dust. Do not use chemical products, bleaches, or household cleaning products.

If there is a significant buildup of dirt or stains from user handling, use isopropyl alcohol with the help of a soft cloth. The brushed stainless steel and glass are sensitive to abrasion, keep that in mind when cleaning them. Make sure to clean the plates properly, soap or alcohol residues may stain the equipment.

18. Warranty and Technical Assistance:

Digicon is responsible for the design, good quality of labor, and materials used in the manufacturing of its products, ensuring that the equipment and all its parts are free from defects or flaws in material and manufacturing. Digicon undertakes to replace or repair, at its sole discretion, in its factory in Gravataí or in its branch in São Paulo, any part or equipment that presents a manufacturing defect, at no cost to the buyer, within the conditions stipulated below:

1. The buyer is responsible for the round-trip transportation expenses of the product.
2. The warranty period is counted from the issuance of the sales invoice and comprises: 12 (twelve) months for the equipment, accessories, parts, and components, including the 90 (ninety)-day legal warranty period.

Legal Warranty:

"The consumer has a period of 90 (ninety) days, counted from the date of issuance of the purchase invoice, to complain about apparent irregularities (defects), which are easily and immediately observable in the product, such as items that constitute the external part and any other accessible to the user, as well as parts of appearance and accessories in general"

The warranty will be provided to the buyer only upon presentation of the invoice (original or copy). Service is provided by opening a ticket through the following emails:

- **Access Control and Time Attendance Area:** sac.vca@digicon.com.br
- **Urban Mobility Area:** sac.mobilidadeurbana@digicon.com.br
- **Information required to open a ticket:**

Company name:
Tax identification number:
Full Address:
Name of the Responsible:
Contact Phone Number:
Model(s) of the Equipment(s) with defect..
Serial Number(s) of the Equipment(s) with defect(s).
Defect(s) Identified.

NOTES:

Digicon S.A.

Development, Factory, Technical Support, and Sales.

Nissin Castiel Street, 640 - Industrial District.

Gravataí/RS ZIP Code: 94045-420

E-mail: vendas.aceso@digicon.com.br

Home page: www.digicon.com.br