

PowerGate UHF Cabin Station

User Guide

PLT-07810, A.0
November 2024

Copyright

© 2024 HID Global Corporation/ASSA ABLOY AB. All rights reserved.

This document may not be reproduced, disseminated, or republished in any form without the prior written permission of HID Global Corporation.

Trademarks

HID GLOBAL, HID, the HID Brick logo, and LinTRAK are trademarks or registered trademarks of HID Global, ASSA ABLOY AB, or its affiliate(s) in the US and other countries and may not be used without permission. All other trademarks, service marks, and product or service names are trademarks or registered trademarks of their respective owners.

Contacts

For technical support, please visit: <http://support.acuity-cloud.com>.

To access the knowledge base, please visit: <https://acuity-cloud.atlassian.net/wiki/spaces/KBA/overview>

EMEA +44 1440 711822 (then select Option 6)

France +33 1 81 93 88 50

APAC +65 6018 3990

Email: support.tcas@hidglobal.com

Website: www.hidglobal.com/solutions/textile-services

What's new

Date	Description	Revision
November 2024	Initial release.	A.0

A complete list of revisions is available in [Revision history](#).

Introduction	5
1.1 General use	6
1.2 Care and maintenance	6
1.3 Important safety information	6
Certification	7
2.1 Regulatory notices	8
2.2 Restriction of Hazardous Substances in Electrical and Electronic Equipment (RoHS)	8
2.3 WEEE (Waste Electrical and Electronic Equipment)	8
2.4 EU and UK	8
2.5 USA	9
2.6 Canada	9
2.7 South Korea	9
Overview	10
3.1 Product description	11
3.2 Key features	11
3.3 General view	12
3.4 Dimensions	14
3.5 Power supply	15
3.6 Ethernet	16
3.7 Safety features	17
Station Recommendations	18
4.1 Reading recommendations	19
4.2 TAG	19
4.3 Containers	20
4.4 Station operation - implementation layout	22
Operation Modes	23
5.1 Push button	24
5.2 LED status	24
5.3 Two-way mode (bidirectional mode)	25
5.4 One-way mode (unidirectional mode)	25
5.5 One-side mode (front only mode)	25
5.6 Error and warning events	26
5.6.1 Auto test	26
5.6.2 Door operation monitoring	26
5.6.3 Automatic roll exit detection (Unidirectional mode only)	26
5.6.4 Connection loss	26

Installation	27
6.1 Recommendations before installation	28
6.2 Installation and mounting	28
6.3 Network configuration	29
6.4 Discovering the PowerGate IP Address	29
6.5 Modifying the PowerGate IP address	30
6.5.1 Setting a static IP address	30
6.5.2 Returning to DHCP mode	30
Maintenance	31
7.1 General care	32
7.2 Periodic inspection (Automated version)	32
Technical Specifications	33
8.1 Specifications	34
8.1.1 PowerGate (ETSI frequency band regions)	34
8.1.2 PowerGate (FCC frequency band regions)	35
8.2 Bottom plate drawing - PowerGate (ETSI frequency band regions)	36
8.3 Product labels	37
8.3.1 PowerGate (ETSI frequency band regions)	37
8.3.2 PowerGate (FCC frequency band regions)	38

Section 01

Introduction

1.1 General use

Please observe the following:

- Ensure the station is always kept clean.
- Do not store or site the station in an excessively hot area (extreme heat can shorten the life of electronic devices, damage batteries, and warp, melt, or crack certain plastics).
- Do not store or site the station in a cold area. When the station warms up to its normal operating temperature, moisture may form inside the station. This moisture may damage electronic circuit boards (extreme cold can shorten the life of electronic devices, damage batteries, and may crack certain plastics).
- Do not store or site the station in any location that is dirty, dusty, damp, or wet. The station is not waterproof and should not be exposed directly to rain or excessive moisture. Under certain conditions, water or moisture may enter the circuitry and damage it.
- Do not attempt to disassemble the station, as non-professional disassembly of the station may damage it.
- Handle the station with care, as extreme bumps or shocks may damage internal circuit boards.
- Do not allow children to operate or play in the immediate vicinity of the station.
- Do not paint the station as paint may clog moving parts and prevent proper operation. Paint with metallic contents may limit the station's performance when reading RFID tags.
- Do not clean the station with aggressive chemicals, cleaning solvents, or strong detergents.
- Use only HID approved accessories for the station.
- If the station or any accessories are not working correctly, contact your HID representative.

1.2 Care and maintenance

The suggestions below will increase the lifetime of the station:

- Ensure that the station is serviced regularly. Please contact your HID representative to discuss an appropriate service schedule.
- Regularly clean the station and the surrounding area and ensure any trip hazards or debris are removed from immediate location around the station.
- Take care not to scratch, bump, knock, or damage the station.
- If the surface of the station becomes soiled, clean with a soft damp cloth. Use a mild soap-and-water solution (never use aggressive cleaning chemicals).

1.3 Important safety information

When connecting the station to another device, ensure that there is full compatibility.

Important: Do not connect incompatible products.

As with all RF equipment, this station should only be used in a suitable location, and for its intended purpose.

Section 02

Certification

2.1 Regulatory notices

An RFID system composed of an RF emission device connected to a RFID reader is subject to national regulations that may differ by country.

All radio components of the PowerGate are certified for major regions, including EU, China, Singapore, and USA.

It is the responsibility of the end user to use the PowerGate as described in this User Guide or any other HID Documentation.

Any modification of the PowerGate is prohibited without the written consent of HID. Unauthorized modifications may void the conformity of the equipment to CE and RTTE Directives and will void the HID warranty.

Important: If the PowerGate is further integrated in a different product, it is the responsibility of the manufacturer of this complementary product to obtain the required approvals for this product.

2.2 Restriction of Hazardous Substances in Electrical and Electronic Equipment (RoHS)

HID certifies that this product is compliant with the European Directive 2015/863 of the use of the following hazardous substances.

Note: This declaration is based on information provided by our suppliers and subcontractors.

2.3 WEEE (Waste Electrical and Electronic Equipment)

In the European Union, the Waste Electrical and Electronic Equipment Directive (WEEE) symbol on the product label indicates that this product should not be disposed of with household waste. It should be deposited at an appropriate facility to enable recovery and recycling. More information about HID products can be found at:

<https://www.hidglobal.com/certifications/weee-compliance>



2.4 EU and UK

- HID Global hereby declares that these proximity readers are in compliance with the essential requirements and other relevant provisions of Directive 2014/53/EU.
- Por el presente, HID Global declara que estos lectores de proximidad cumplen con los requisitos esenciales y otras disposiciones relevantes de la Directiva 2014/53/EU.
- HID Global déclare par la présente que ces lecteurs à proximité sont conformes aux exigences essentielles et aux autres stipulations pertinentes de la Directive 2014/53/EU.
- A HID Global, por meio deste, declara que estes leitores de proximidade estão em conformidade com as exigências essenciais e outras condições da diretiva 2014/53/EU.
- HID Global bestätigt hiermit, dass die Leser die wesentlichen Anforderungen und anderen relevanten Bestimmungen der Richtlinie 2014/53/EU erfüllen.
- HID Global dichiara che i lettori di prossimità sono conformi ai requisiti essenziali e ad altre misure rilevanti come previsto dalla Direttiva europea 2014/53/EU.

Download copies of the Radio Equipment Directive Declaration of Conformity (DoC) at:

<http://www.hidglobal.com/certifications>

2.5 USA

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.

Caution: Any changes or modifications to this device not explicitly approved by the manufacturer could void your authority to operate this equipment.

Note: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

2.6 Canada

- 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.

2.7 South Korea

무선 사양 (Wireless specification): EPC global UHF Class 1 Gen2 / ISO18000-63 RFID

사용주파수 (Used Frequency): 917-920.8 MHz

채널 수 (the number of channels): 6

공중선전력 (Antenna Power): 9 dBic

변조방식 (Type of the modulation): DSB-ASK, PR-ASK transmit modulation modes

Section 03

Overview

3.1 Product description

The PowerGate is a UHF RFID station specifically designed for automatic inventory of items using UHF RFID technology. The PowerGate has a shielded structure and manual or automatic doors that ensures only items placed inside are identified, providing optimized reading performance at UHF.

3.2 Key features

Feature	Description
Operating Frequency	All radio components certified for major regions, including EU, China, Singapore, and USA
Air Protocol	EPCglobal UHF Class 1 Gen2 ISO18000-6C
Transmit Power	10 to 31.5 dBm (depending on region regulations)
Host Interface	10/100BASE-T auto-negotiate (full/half) with auto-sensing MDI/MDX for auto-crossover (RJ-45)
Host Protocol	HID application or Custom application based on HID PowerGate SDK. Please refer to specific PowerGate SDK Designer Guide
Door	Manual or Automatized (depending on PowerGate model)
Firmware	Remotely upgradeable
Miscellaneous	Lights and push button Presence and door position sensors

3.3 General view

The PowerGate is specifically designed for automatic inventory of items using UHF RFID technology. The PowerGate shielded structure ensures only items placed inside are identified.

- The Manual version of the PowerGate has two doors at the front which need to be manually operated, and a closed panel at the rear.
- The automated version has mechanically operated front and rear doors. An operating panel is located on the front left side of the doors, and on the rear right side of the doors. These panels have a red and green light on them which report the stations status (Ready, Operation in progress, and Default). A push button to activate the inventory process is located below the lights.

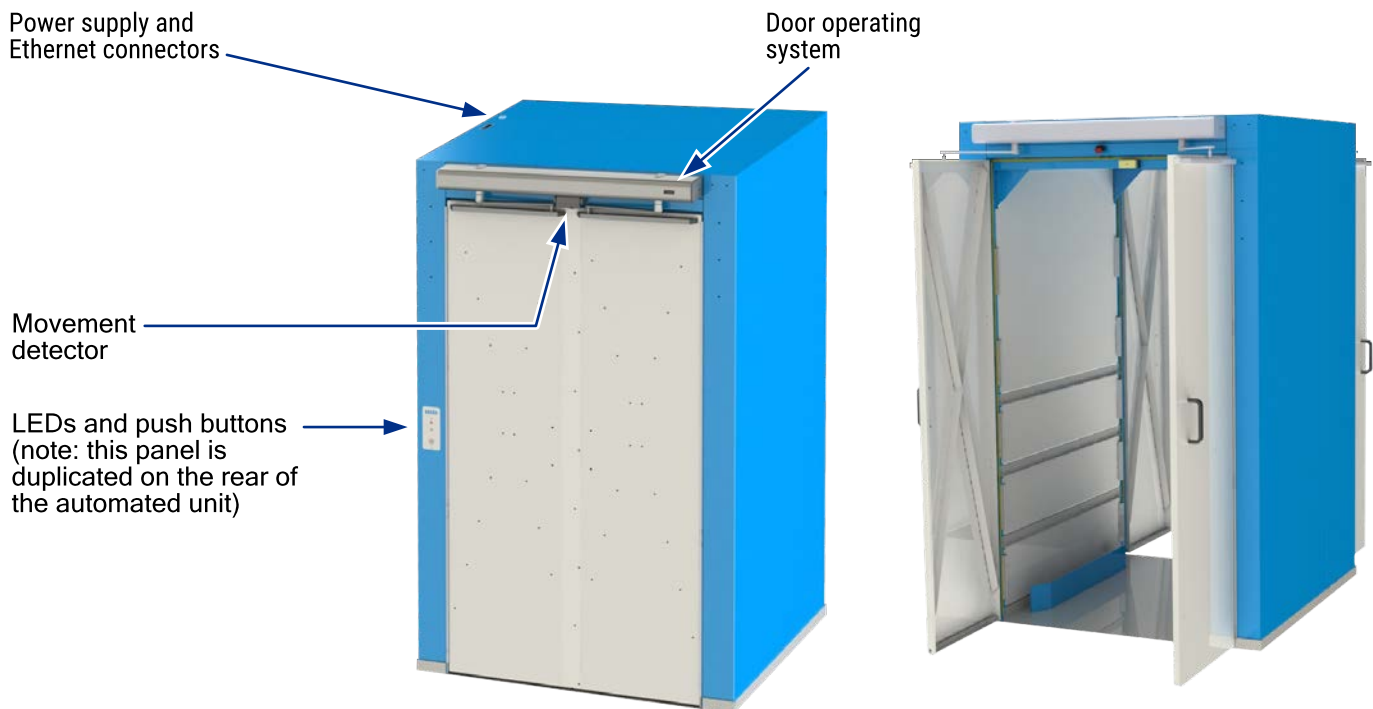
Electromagnetic locks located on front door ensure that the doors may not be opened during the inventory process (Manual version).

Note: The RFID inventory process can only occur when the doors are fully closed and locked.

The PowerGate station is delivered with internal protective guards, which will be installed during the initial setup. These protect the internal structure from accidental knocks. HID strongly recommends protecting the PowerGate outside corners from accidental knocks (exterior protection is not supplied with the station).

Lights and controls:

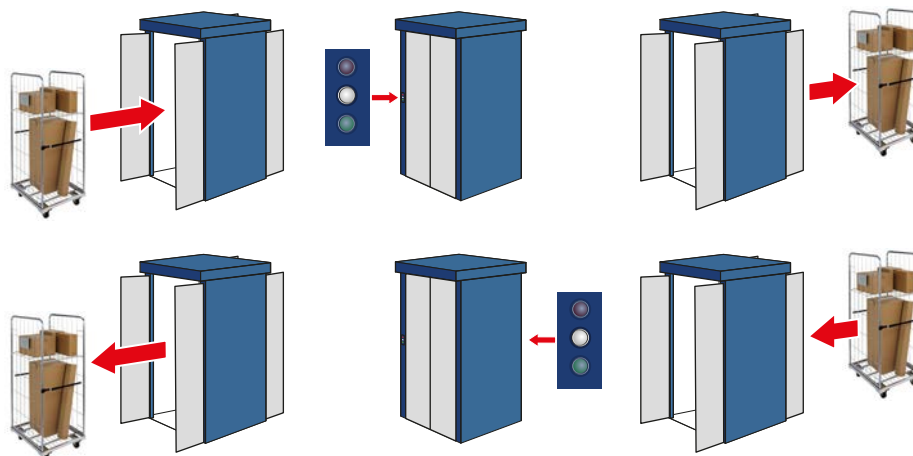
- **Red light:** Warning or error
- **Green light:** Ready or Operating cycle in progress
- **Push button:** Activates a cycle



The PowerGate station may be configured in three different ways:

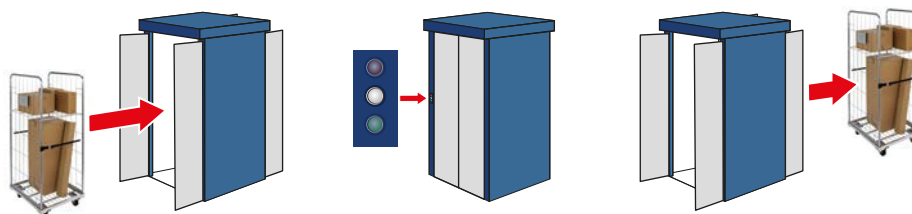
2-way (bidirectional mode)

Entrance and exit of the PowerGate can be done in both directions, enabling check-in/out operations with the same station. This mode is available only for PowerGate automated versions.



1-way (unidirectional mode)

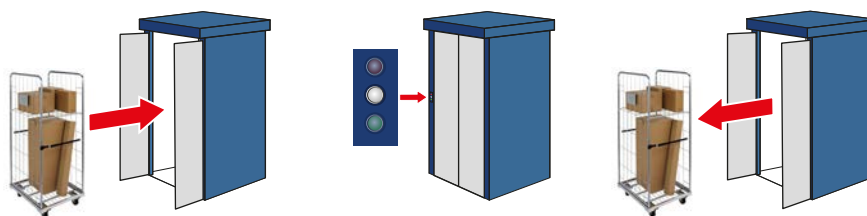
Front door is the entrance and rear door is the exit of the PowerGate, optimizing inventory processes. This mode is available only for PowerGate automated versions.



1-side (front only mode)

Entrance and exit of the PowerGate is via the front door only. This mode is available for any version of PowerGate.

Note: This configuration may be used when the station must be installed in a restricted area (for example, against a wall or in a corner).



Specific IR sensors (Automated version) are used to monitor automatic door opening and closing, according to the selected mode.

Note: The RFID inventory process can only occur when the doors are fully closed.

WARNING: THE POWERGATE STATION IS DELIVERED WITH EXTERNAL AND INTERNAL PROTECTIVE GUARDS WHICH WILL BE PLACED DURING INSTALLATION TO PROTECT IT FROM ACCIDENTAL SHOCKS. DO NOT REMOVE THESE GUARDS.

3.4 Dimensions

	PowerGateCM2 ETSI version – 2 doors (Manual)	PowerGateCA4 ETSI version – 4 doors (Automated)	PowerGateUM2 FCC version – 2 doors (Manual)	PowerGateUA4 FCC version – 4 doors (Automated)
External dimensions				
Width	139 cm	139 cm	160 cm	160 cm
Length - doors closed	135 cm	135 cm	180 cm	180 cm
Length - doors open	194 cm	252 cm	250 cm	320 cm
Height	210 cm	220 cm	210 cm	220 cm
Internal dimensions				
Width	100 cm	100 cm	120 cm	120 cm
Length	125 cm	125 cm	170 cm	170 cm
Height	200 cm	200 cm	200 cm	200 cm
Total weight	200 kg (approximately)	330 kg (approximately)	220 kg (approximately)	350 kg (approximately)

3.5 Power supply

An AC power plug (IEC male C14) is installed on the top of the PowerGate station, Connect the power supply cable to this plug.

- **Power rating PowerGate (Manual version):** 100-240 V AC / 50-60 Hz / 0.4-0.15 A
- **Power rating PowerGate (Automated version):** 100-240 V AC / 50-60 Hz / 4-2 A

WARNING: THE ELECTRICAL CONNECTION CABLE MUST BE RATED TO WITHSTAND 125% OF THE MAXIMUM CURRENT, PER WIRE.

Note: To disconnect the PowerGate station from the mains, unplug the power cable from the AC power input located on the top of the station.

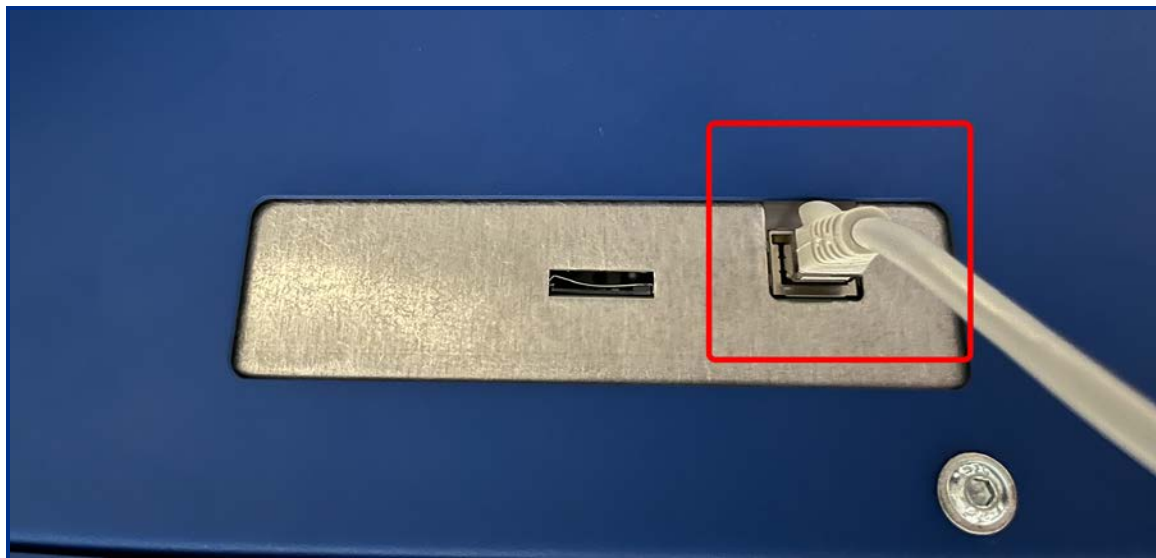


3.6 Ethernet

A standard female RJ45 Ethernet connector is installed on the top of the PowerGate station for connection to the host network.

Note:

- For a direct connection to a computer (without an Ethernet switch, or access through a LAN network), a crossed Ethernet cable is recommended.
- The PowerGate station must be connected to the host system using a shielded CAT6 Ethernet cable.



3.7 Safety features

The automated version of the PowerGate station is equipped with proximity sensors that detect the presence of objects, or people, within the opening and closing zones of the doors.

WARNING: SENSORS MUST NOT BE DISMANTLED, DISABLED OR BYPASSED.

WARNING: PEOPLE AND OBJECTS MUST REMAIN OUTSIDE THE OPENING AND CLOSING ZONE OF EACH OF THE AUTOMATIC SWINGING DOORS, TO AVOID INJURY OR DAMAGE.

The automatic door operation contains integrated safety features, including:

- Limiting door force
- Limiting door speed
- Reverse motion capability in the case of an obstruction being detected while opening
- Immediate STOP capability in the case of an obstruction being detected while closing

WARNING: DANGER MAY STILL ARISE FOR THE USER IF THE STATION IS NOT USED AS INTENDED.

WARNING: KEEP FINGERS AND OTHER BODY PARTS AWAY FROM DOOR HINGES TO AVOID INJURY.

Important: Installation, maintenance, and repairs must only be performed by qualified and authorized personnel.

Note:

- Without electrical power, the front and rear doors will open automatically.
- The PowerGate station has been designed to operate without an operator being located inside the station, during RFID inventory operations (front and rear doors closed).

Section 04

Station Recommendations

4.1 Reading recommendations

Note: A number of different parameters may impact tag reading performance of the PowerGate.

Possible causes of reader performance issues may include:

- UHF reader settings may be incorrect.
- The item type, or quantity. Textile items should be dry, or with limited moisture content.
- Container materials. The containers should ideally be made of a plastic material, even if metal grid rolls are marked as UHF compliant.
- How tagged items have been loaded or stacked in the container.

We strongly recommend that you contact your HID technical representative for advise on adjusting the station's settings to achieve optimal performance.

Some additional recommendations are listed below.

4.2 TAG

The PowerGate has been designed to provide optimal performance with LinTRAK® tags (metal tags not included).

For optimal tag detection, it must be attached to the textile item according to the HID tag attachment application note and have a minimum of 4 m read range in free air at the set frequency band of the PowerGate.

Please contact your HID technical representative to define best tag locations on your items.

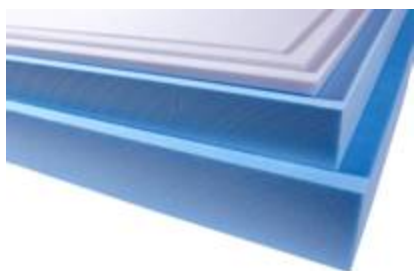
4.3 Containers

In the case of industrial laundries, some trolleys may have a plain metallic bottom plate, as illustrated below:



The metal plate may drastically affect the UHF field. Tags placed directly onto, or in very close proximity of the metal plate may not be read. Should this occur, HID recommends placing a spacer between this bottom plate and nearest items, to maximize reading performance.

- Spacer thickness: Approximately 25 mm
- Spacer material: Extruded polystyrene foam sheets, plastic cardboard sheets, cardboard, or place a first shelf (grid) on the bottom plate.



Adding a spacer on metallic grid shelves can also be useful, even if the probability of having a tag directly in contact with the metal of the shelf is more limited.



Trolleys with large mesh grids are preferable. Small mesh grids impact UHF field penetration inside the roll and may affect overall reading performance.

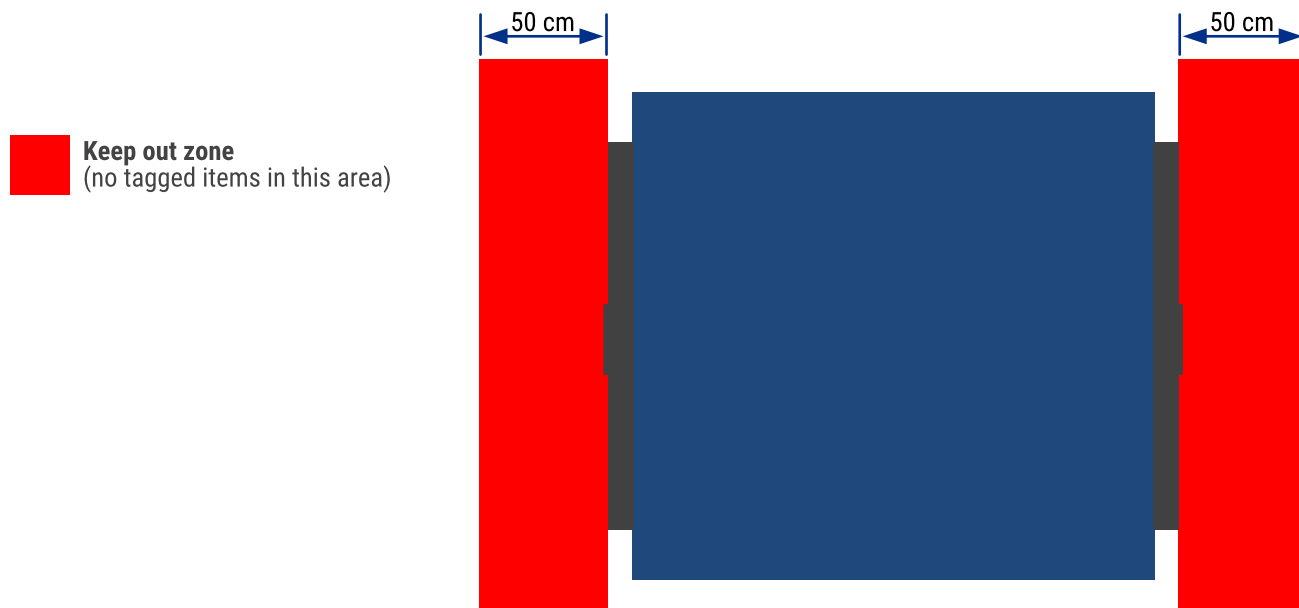


4.4 Station operation - implementation layout

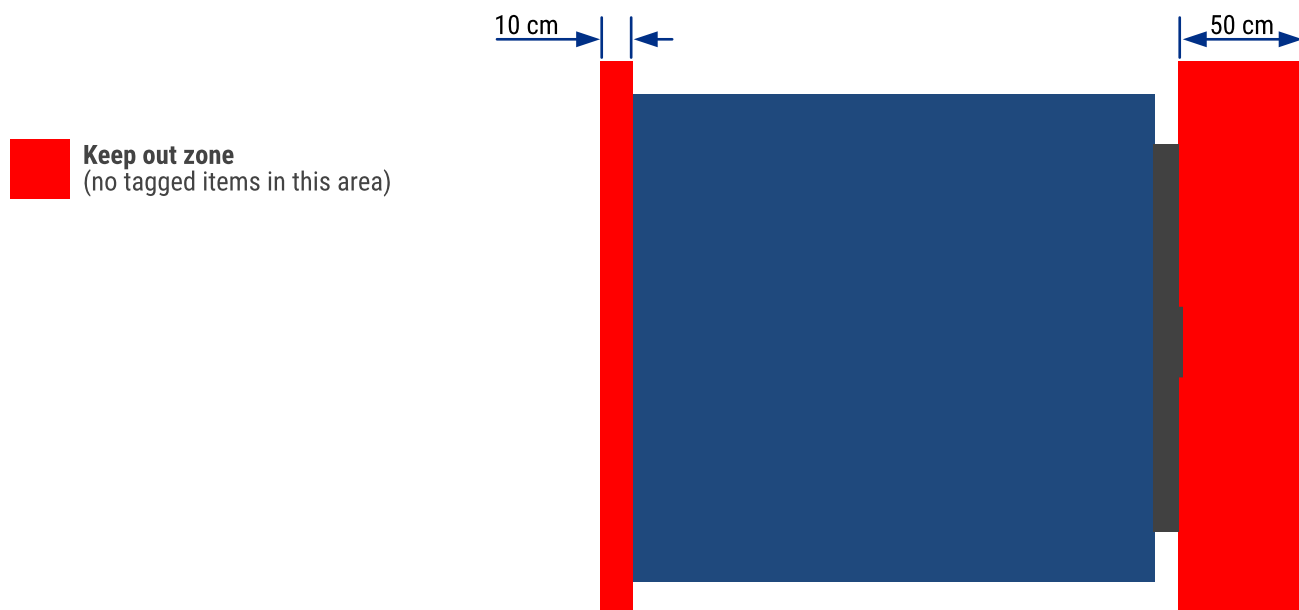
The PowerGate station is fully shielded to maximize the internal reading accuracy and to avoid undesired tag readings from outside (keep out zone).

For this reason, when the station is in use, the **keep out zone** should be respected, and no trolleys containing tagged items should be located within this area. This zone should be a minimum of 50 cm wide, along each side of the PowerGate.

Automated version - top view



Manual version - top view



Section 05

Operation Modes

5.1 Push button

Located at the entrance (and exit for Automated version), push buttons can be used to:

- Start an operating cycle (can be deactivated by software – in this case, cycle is started by software).
- Stop an operating cycle (can be deactivated by software – in this case, cycle is stopped by software).

5.2 LED status

Located at the entrance (and exit for Automated version), the LEDs are used to report:

- All LEDs **Blinking**: No application software connected.
- Green LED **ON**: Ready to start cycle (push button or software activation).
- Green LED **Blinking**: Inventory/Encoding process ongoing.
- Red LED **Blinking**: Warning (obstacle detected that needs to be removed).
- Red LED **ON**: Fatal error (to be handled at upper application level).

5.3 Two-way mode (bidirectional mode)

In bidirectional mode, the front and rear doors may be used to enter or exit the station.

Operating cycle

1. Both front and rear sets of doors are open.
2. Operator places the container inside the station from the front or rear.
3. Operator presses one of the push buttons (front or rear) or cycle activation comes from software application.
4. Both front and rear sets of doors close.
5. RFID operation starts.
6. At the end of RFID operation, both front and rear sets of doors open.
7. Operator may remove the container from either the front or rear doors.
8. Station is now ready to be loaded for the next cycle.

5.4 One-way mode (unidirectional mode)

In unidirectional mode, the front doors are used to enter the station, and the rear doors are used to exit the station.

Operating cycle

1. Front doors are open, the rear exit doors are closed.
2. Operator places the container inside the station.
3. Operator presses the front button or cycle activation comes from software application.
4. Front doors close.
5. RFID operation starts.
6. At the end of RFID operation, both front and rear sets of doors open.
7. The station waits for the container to exit, and exit doors are closed automatically (on container exit detection or by timeout if no container detection in a given time).
8. Station is now ready to be loaded for the next cycle.

5.5 One-side mode (front only mode)

In front only mode, it is only the front doors that are used to access the station; the rear doors are disabled.

Operating cycle

1. Front doors open.
2. Operator places the container inside the station.
3. Operator presses front button or cycle activation comes from software application.
4. Front doors close.
5. RFID operation starts.
6. At the end of RFID operation, the front doors open.
7. Operator may remove the container from the front doors.
8. Station is now ready to be loaded for the next cycle.

5.6 Error and warning events

5.6.1 Auto test

During the startup phase, the PowerGate proceeds with an internal self-test of hardware and components. In the event of an error, the PowerGate automatically resets and enters an **ERROR** state. The upper application will handle this error case.

5.6.2 Door operation monitoring

Before cycling any of the doors, the PowerGate checks for obstacles using IR sensors. If an obstacle is detected, no door operation is processed. The PowerGate will wait for the obstacle to be removed for a configurable period of time (red LED blinking, indicating a warning) then resume door cycling. No upper application intervention is required.

After this timeout expiration, the PowerGate enters an **ERROR** state. The upper application will handle this error case.

5.6.3 Automatic roll exit detection (Unidirectional mode only)

After completing an RFID operation, the PowerGate station uses the exit IR sensor to detect the roll exit for a configurable period of time. If the roll exit is not detected within this period of time, the exit door will be closed without intervention of the upper application.

5.6.4 Connection loss

In case of upper application disconnection, the PowerGate automatically resets and enters its **IDLE** state.

Section 06

Installation

6.1 Recommendations before installation

Prior to installation, the following recommendations must be considered and checked:

- The PowerGate station parts will be shipped in a wooden crate, approximately: 2.3 m depth × 1.6 m height × 0.9 m width (400 kg weight).

Note: Check the lifting capacity of any unloading equipment that will be used for the site installation.

- Shipped package or individual PowerGate station parts should be stocked as close as possible to the installation location (<5 m). Free and easy access is required between stocked PowerGate parts and the final installation location.
- Ensure that the mains power cable has been routed to the top of the PowerGate station (a female IEC socket is required to power the station).
- Ensure that a CAT6 S/FTP Ethernet cable has been routed to the top of the PowerGate station (a male RJ45 connector is required to connect to the station).
- The exact PowerGate location should be marked on the ground (including external protective guards, if being installed).
- An area free of obstacles is required all around the location during the installation.

Note: The PowerGate station needs to be secured to the ground. Ensure that no lines are laid beneath the surface of the PowerGate (power, water, heating, air ventilation pipes, etc.) when drilling the floor.

6.2 Installation and mounting

Important: The PowerGate station must not be pierced or modified.

Important: The PowerGate station must be installed on a hard and smooth ground (no soft surfaces). The ground should be perfectly plan and level.

Important: Whatever the configuration, the PowerGate will be installed and set up by an HID Certified Integrator.

Note: A drawing of the PowerGate plate is provided in the [Bottom plate drawing - PowerGate \(ETSI frequency band regions\)](#) section.

6.3 Network configuration

The default PowerGate Ethernet configuration mode is DHCP. In case an IP address has not been assigned to the PowerGate station, it will use its fallback Ethernet configuration:

PowerGate Default IP Address	Default Net mask	Default Gateway
169.254.1.1	255.255.255.0	None

6.4 Discovering the PowerGate IP Address

To easily find the PowerGate IP address on the network, check first its MAC address:

1. Connect the Ethernet cable of your laptop directly to the PowerGate.
2. Assign a static IP address to your laptop in the range of the PowerGate default IP address.
3. Start the **Master Gate Controller** application:
 - a. In the **IP address** field, enter the PowerGate default IP address (169.254.1.1) and **Port** with (4242) value.
 - b. Click **Connect** (connection to the default IP address may take around 30 seconds after the PowerGate startup phase).

Note: The PowerGate MAC address reported on main window (under **Configuration** button).

4. Reconnect the PowerGate and your laptop to the network (ensure laptop is reconfigured in DHCP mode).
5. Use an IP scanner application to retrieve the IP address assigned to the PowerGate from its MAC address.

6.5 Modifying the PowerGate IP address

6.5.1 Setting a static IP address

1. Connect the Ethernet cable of your laptop directly to the PowerGate.
2. Assign a static IP address to your laptop in the range of the PowerGate default IP address.
3. Start the **Master Gate Controller** application:
 - a. In the **IP address** field, enter the PowerGate default IP address (169.254.1.1) and **Port** with (4242) value.
 - b. Click **Connect** (connection to the default IP address may take around 30 seconds after the PowerGate startup phase).
4. Click **Configuration** and then:
 - a. Uncheck the **DHCP** box.
 - b. Enter the static IP address, Net mask, and Gateway in their respective fields.
 - c. Click **Save configuration** to save the new parameters.
 - d. Click the cross (top right corner) to close the configuration window.
 - e. Exit the application.

6.5.2 Returning to DHCP mode

1. Connect the Ethernet cable of your laptop directly to the PowerGate.
2. Assign a static IP address to your laptop in the range of the PowerGate IP address.
3. Start the **Master Gate Controller** application:
 - a. In the **IP address** field, enter the PowerGate default IP address (169.254.1.1) and **Port** with (4242) value.
 - b. Click **Connect** (connection to the default IP address may take around 30 seconds after the PowerGate startup phase).
4. Click **Configuration** and then:
 - a. Uncheck the **DHCP** box.
 - b. Enter the static IP address, Net mask, and Gateway in their respective fields.
 - c. Click **Save configuration** to save the new parameters.
 - d. Click the cross (top right corner) to close the configuration window.
 - e. Exit the application.

Section 07

Maintenance

7.1 General care

Important: Do not clean the PowerGate station using pressure washers, harsh chemicals, cleaning solvents, or strong detergents.

7.2 Periodic inspection (Automated version)

It is recommended that a technical safety inspection is performed by an appropriate specialist at least twice a year. The following must be recorded:

- The time of the inspection.
- The date of the inspection.
- Duration of the inspection.
- The results of the inspection.

You should keep these records in a secure location. Please contact your HID representative to define a maintenance contract.

Important: Prior to any inspection, disconnect the PowerGate station from the mains electricity supply.
Always unplug the electrical socket located on the top of the station.
Always shut off and lockout the circuit breaker the station is connected to.
Safety lockout tagout procedures should always be followed.

Section 8

Technical Specifications

8.1 Specifications

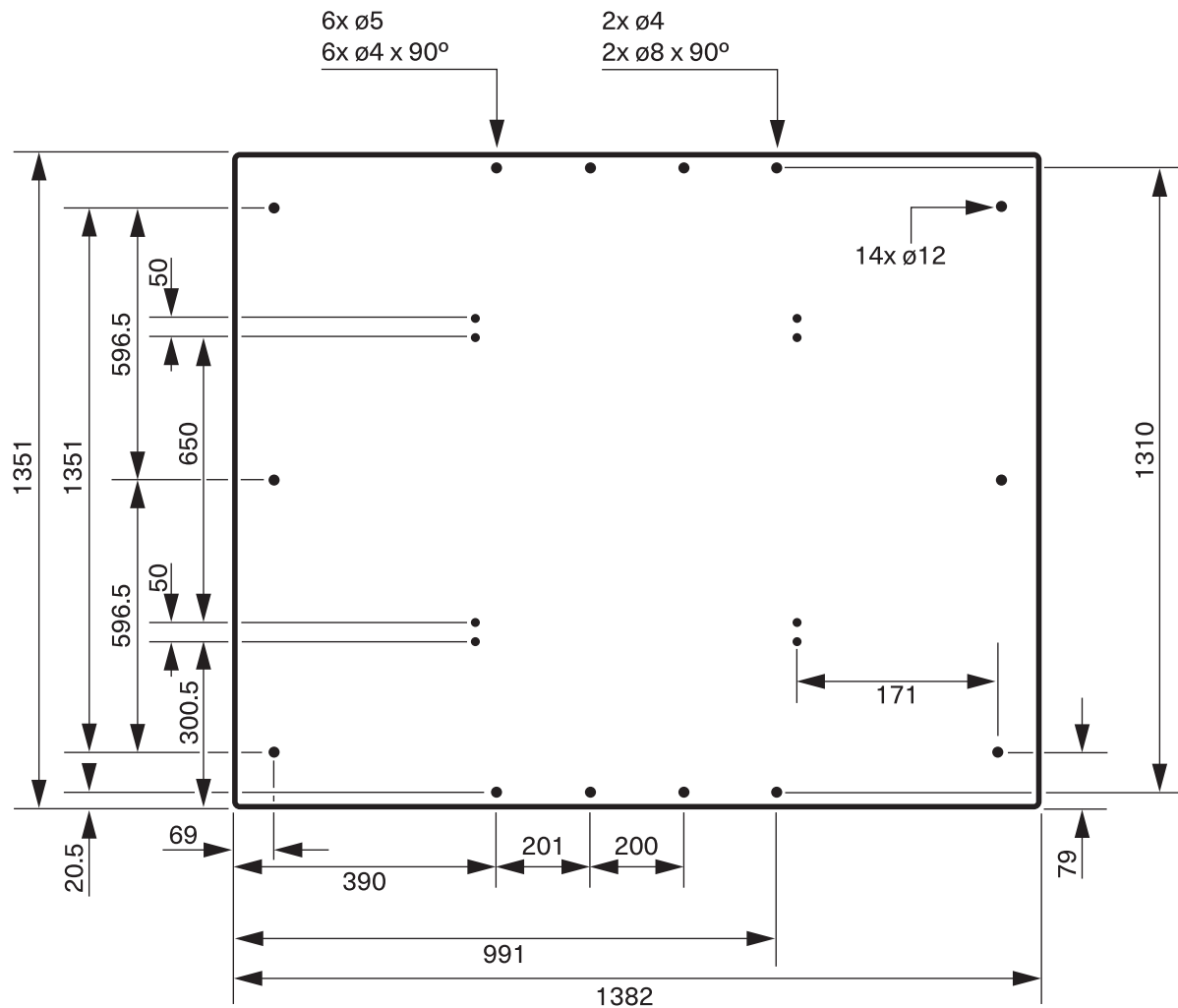
8.1.1 PowerGate (ETSI frequency band regions)

Description	Models: PowerGateCM2 & PowerGateCA4
External dimensions (W x L x H)	139 cm x 135 cm x 210 cm (Manual version - doors closed) 139 cm x 194 cm x 210 cm (Manual version - doors opened) 139 cm x 135 cm x 220 cm (Automated version - doors closed) 139 cm x 252 cm x 220 cm (Automated version - doors opened)
Internal dimensions (W x L x H)	100 cm x 125 cm x 200 cm
Weight	200 / 330 kg (Manual / Automated version, approximately)
Power consumption	35 – 370 W max (Manual / Automated version)
Operating temperature	0°C to +50°C
Storage temperature	-20°C to +70°C
Operating frequency	865.7 to 867.5 MHz (4 channels)
Air protocol	EPCglobal UHF Class 1 Gen2 ISO18000-6C
Transmit power	10 to 31.5 dBm (depending on region regulations)
Host interface	10/100BASE-T auto-negotiate (full/half) with auto-sensing MDI/MDX for auto-crossover (RJ-45)
Host protocol	HID application or Custom application based on HID PowerGate SDK. Please refer to specific PowerGate SDK Designer Guide
Firmware	Remotely upgradeable
Miscellaneous	Lights and push button Presence and door position sensors

8.1.2 PowerGate (FCC frequency band regions)

Description	Models: PowerGateUM2 & PowerGateUA4
External dimensions (W x L x H)	160 cm x 180 cm x 210 cm (Manual version - doors closed) 160 cm x 250 cm x 210 cm (Manual version - doors opened) 160 cm x 180 cm x 220 cm (Automated version - doors closed) 160 cm x 320 cm x 220 cm (Automated version - doors opened)
Internal dimensions (W x L x H)	120 cm x 170 cm x 200 cm
Weight	220 / 350 kg (Manual / Automated version, approximately)
Power consumption	35 – 370 W max (Manual / Automated version)
Operating temperature	0°C to +50°C
Storage temperature	-15°C to +70°C
Operating frequency	902.75 to 927.25 MHz (or a subset of frequencies in this band depending on the country concerned)
Air protocol	EPCglobal UHF Class 1 Gen2 ISO18000-6C
Transmit power	10 to 31,5 dBm (depending on region regulations)
Host interface	10/100BASE-T auto-negotiate (full/half) with auto-sensing MDI/MDX for auto-crossover (RJ-45)
Host protocol	HID application or Custom application based on HID PowerGate SDK. Please refer to specific PowerGate SDK Designer Guide
Firmware	Remotely upgradeable
Miscellaneous	Lights and push button Presence and door position sensors

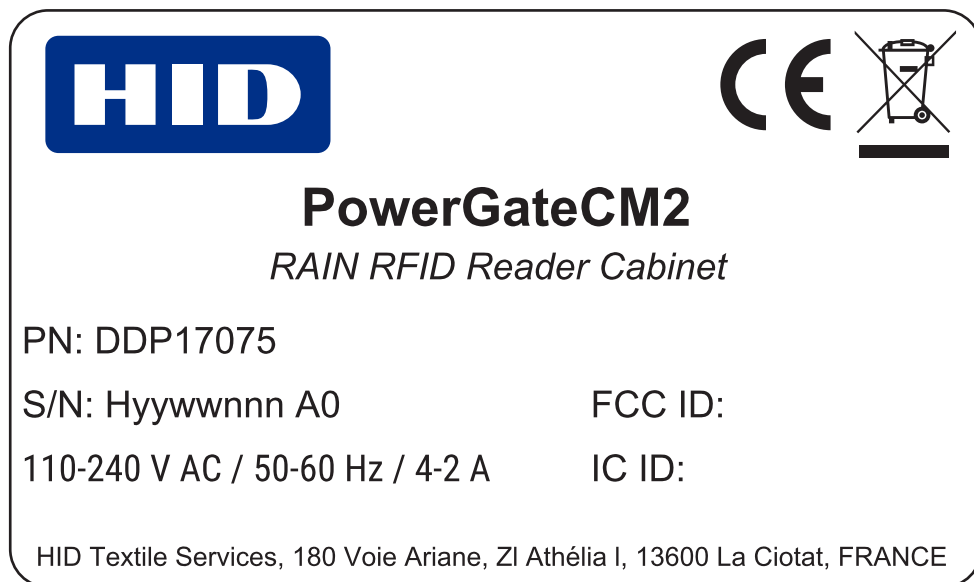
8.2 Bottom plate drawing - PowerGate (ETSI frequency band regions)



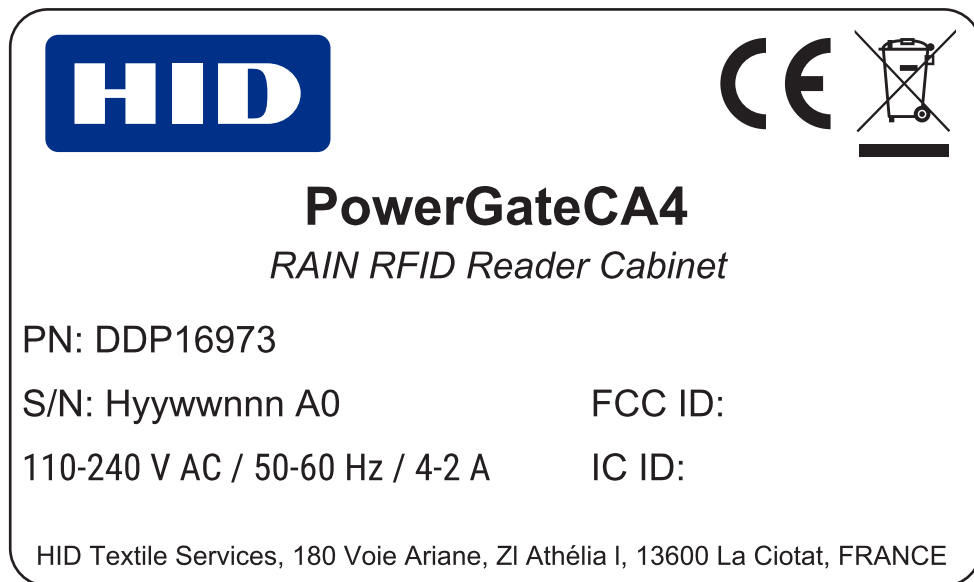
8.3 Product labels

8.3.1 PowerGate (ETSI frequency band regions)

PowerGateCM2



PowerGateCA4



8.3.2 PowerGate (FCC frequency band regions)

PowerGateUM2



PowerGateUM2
RAIN RFID Reader Cabinet

PN: DDP17077

S/N: Hyywwnnn A0 FCC ID:
110-240 V AC / 50-60 Hz / 4-2 A IC ID:

HID Textile Services, 180 Voie Ariane, ZI Athélia I, 13600 La Ciotat, FRANCE

PowerGateUA4



PowerGateUA4
RAIN RFID Reader Cabinet

PN: DDP17076

S/N: Hyywwnnn A0 FCC ID:
110-240 V AC / 50-60 Hz / 4-2 A IC ID:

HID Textile Services, 180 Voie Ariane, ZI Athélia I, 13600 La Ciotat, FRANCE



Revision history

Date	Description	Revision
November 2024	Initial release.	A.0



hidglobal.com

For technical support, please visit: <https://support.hidglobal.com>

© 2024 HID Global Corporation/ASSA ABLOY AB.

All rights reserved.

PLT-07810, Rev. A.0

Part of ASSA ABLOY