



# TURNSTILES & GATES

## ACCESS CONTROL SYSTEMS

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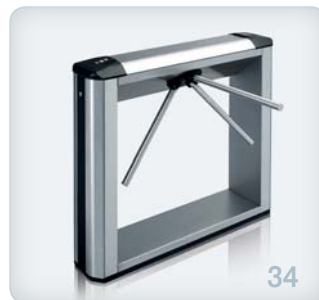
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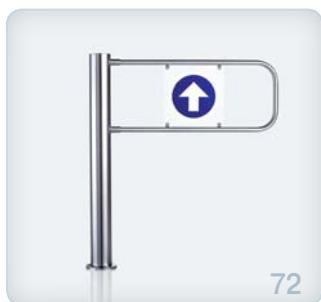
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## GENERAL INFORMATION ON PERCo-Web SYSTEM

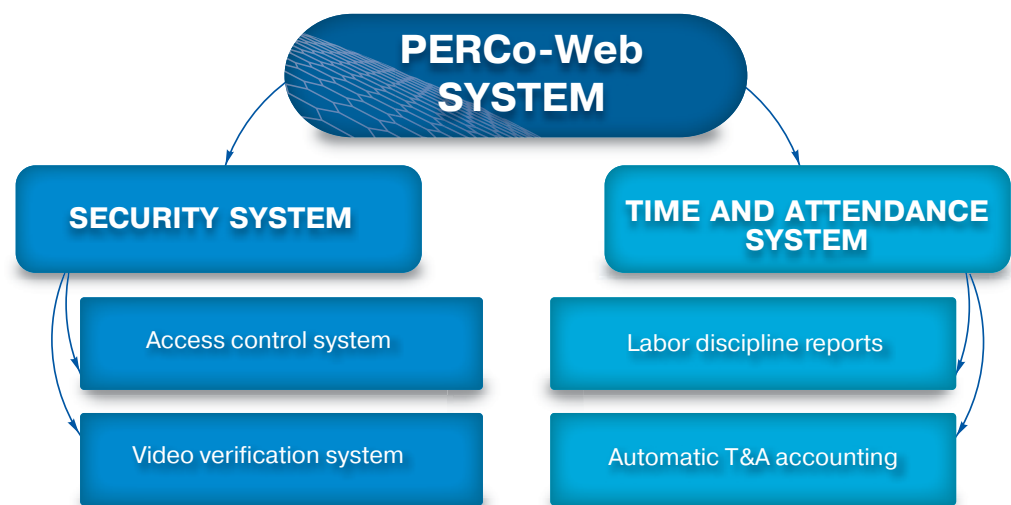
PERCo-Web is a multifunctional access control system with Web interface. PERCo-Web system provides a solution for security and efficiency improvement of an enterprise. Efficiency improvement includes reduction of labor discipline violations, automatic Time & Attendance and payroll accounting, automatic issuing of permanent and temporal access authorization cards and other processes.

Security control is performed by united access control, video surveillance and fire alarm systems. The advantage of PERCo-Web system is provided by the fact that the same equipment is used for security reasons and for efficiency improvement reasons. This process provides no impediments to security reasons, that's why it does not influence processing speed and reliability of the system.

Web-interface allows to organize remote access to the program from a workplace of an employee. System software and database are installed on one computer (server), all users work in the system via Web-browser. In such case there is no need to install software at workplaces of users.

PERCo-Web system is designed for enterprises, facilities, offices, business-centers that require optimal complex of access control and Time & Attendance management functions.

### Functionality of the system



PERCo-Web provides access control and efficiency improvement solutions.

#### Security:

- access deny for unauthorized persons
- assignment of employees access rights according to time, room and status
- verification – access is denied to a person who uses someone else's card
- issuing of access authorization cards in the form of badges with photo, name, etc. of the person
- access of visitors with the use of temporal access authorization cards along with automatic return of cards at the exit
- arming of rooms in terms of internal system security
- fire alarm system
- vehicle access

#### Efficiency improvement:

- registration of start/end of business day on IP-Stiles and special T&A terminals
- control of labor discipline violation (reports on employees if they are late, absent or have left before the end of business day)
- automatic T&A accounting
- support of week, shift or flextime schedules; operative calculation of working time balance
- automatic input of personal data of employees and visitors with the use of document recognition software
- functionality of PERCo-Web system can be increased with the use of specially developed SDK (Software Development Kit). SDK allows integrating of the system equipment with special



## Advantages of Ethernet technology

systems (paid access systems, ticketing systems, ERP-systems, systems for medical facilities, etc.)

Construction of PERCo-Web system complies with modern level of security systems development. The system is based on the network of controllers and computers, connected via Ethernet interface.

- high reliability of security systems thanks to standard IT-solutions and operation of system in the interconnect address space
- controllers equipped with Ethernet interface can be connected directly to local network without any additional equipment
- high data transmission rate and parallel operation of all controllers allow constructing security system without any limitations to the number of controllers, including those located in different buildings, districts and cities
- simultaneous processing of various events provides consistent operation of system in the moments of simultaneous activation of several devices
- extension of system does not require existing devices to be replaced – new devices can be just connected to Ethernet network
- system can be constructed with various ways of access: copper conductor, fiber-optic cable, wireless technology (Wi-Fi, wireless modems)
- Ethernet also makes it possible to use PoE (Power over Ethernet) technology – alternative way of power supply for network devices, that can make installation of ACS more convenient.

## Operating principles of the system

All main «smart» elements of the system – access controllers, registration controllers, control units and also video cameras – are connected directly to Ethernet network, while other equipment – turnstiles, locks, readers, fire alarm indicators – is connected to control elements. It provides high reliability of the system, absence of hardware conflicts and also reasonable costs for equipment installation.

EMM/HID and MIFARE proximity cards and badges are used as identifiers in the system.

When a card is presented, controllers either grant or deny access through operating devices (turnstiles, locks). Events are recorded in non-volatile memory of controllers and then used for labor discipline and T&A control.

Access controllers are equipped with integrated support of alarm lines that allows not only controlling the whole office, but also arming/disarming with the use of access card. The system does not require permanent connection of controllers to a computer with ACS server. Each controller is equipped with non-volatile memory containing system settings, access rights and event log.

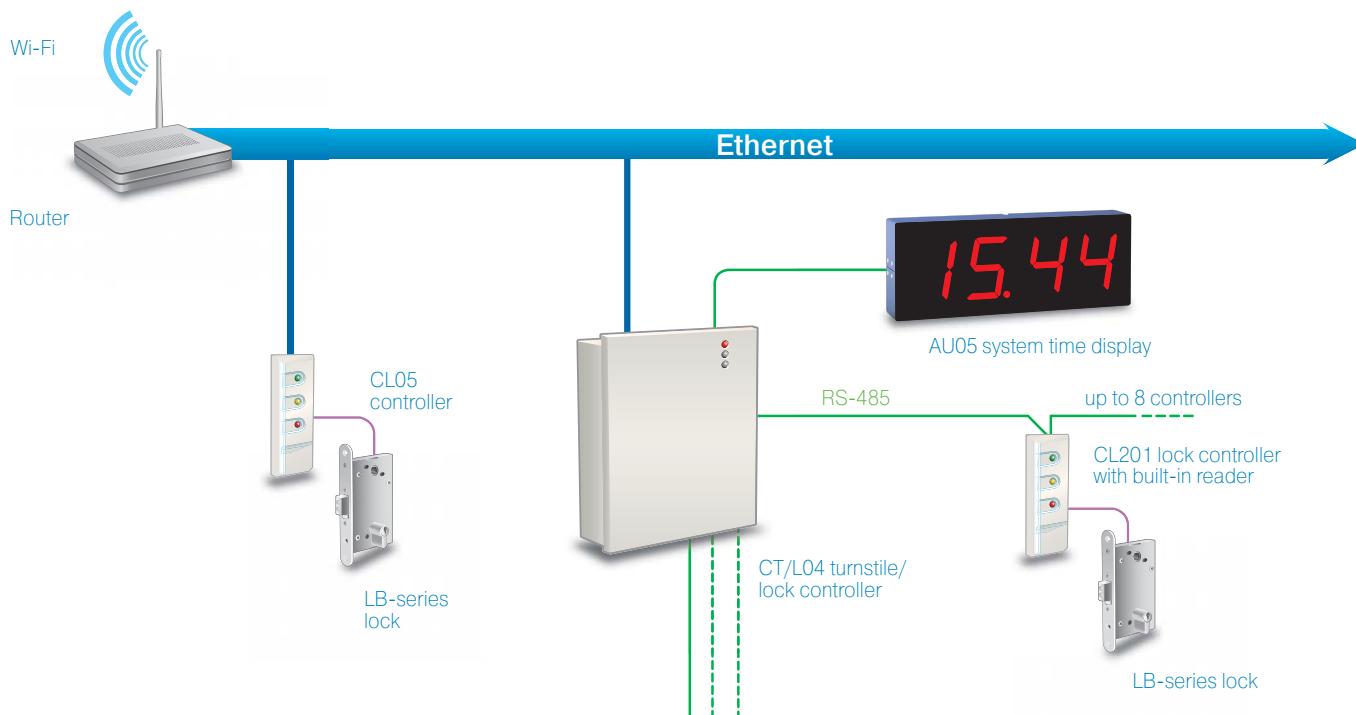
## Main technical specifications of the system

Connection interface	Ethernet
Number of controllers in the system	up to 1000
Total number of identifiers in the system	up to 50 000
Type of identifiers	EMM/HID Proximity cards and tags, MIFARE smart-cards
Number of control space zones	up to 1024
Number of control time zones	up to 256
Number of time intervals for each time zone	4
Number of week schedules	up to 256
Number of flextime day schedules	up to 256
Number of flextime week schedules	up to 256
Programming extent of flextime day schedules	up to 30 days
Programming extent of flextime week schedules	up to 52 weeks
Number of days that can be programmed as days of various types	366

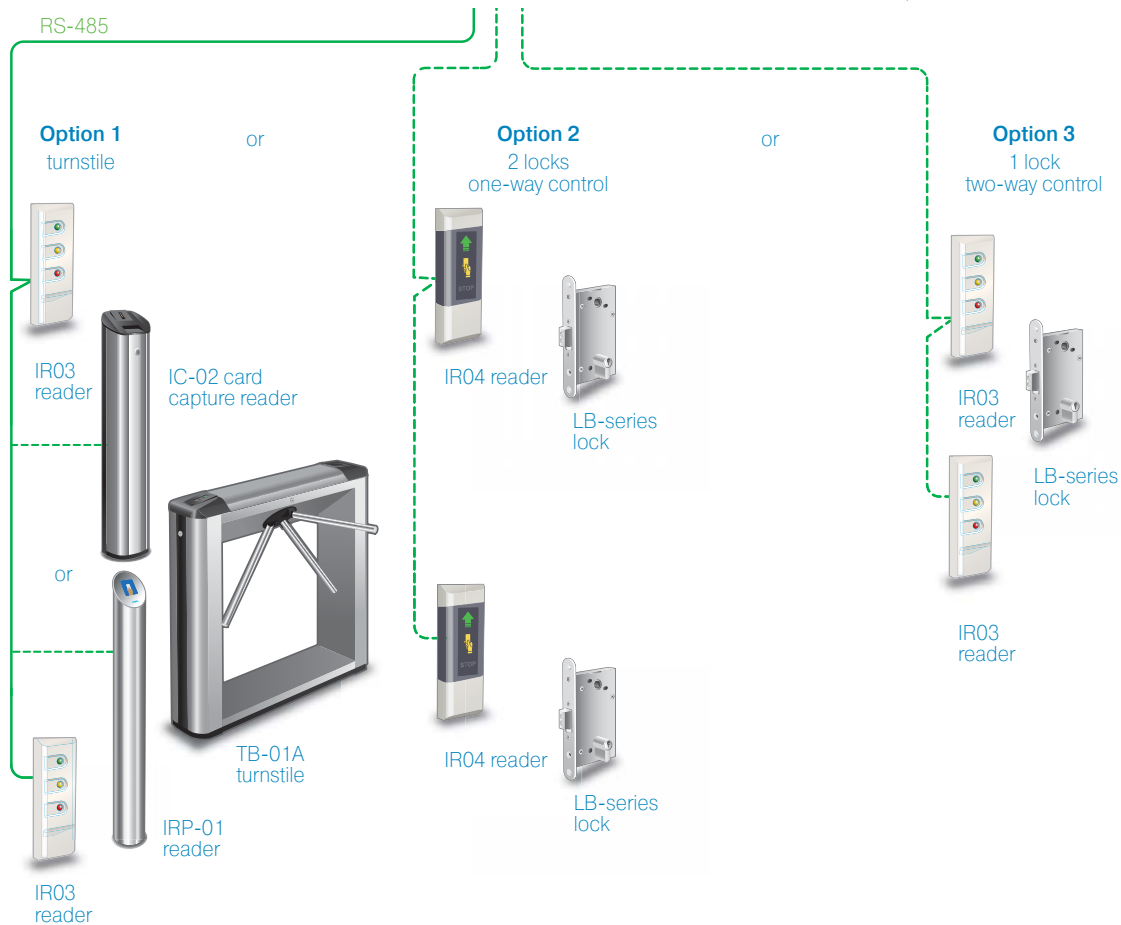
All main elements of PERCo-Web system (controllers and cameras) are connected directly to local Ethernet network, other devices (readers, turnstiles, locks) are connected to controllers.



PERCo-Web access control and T&A system scheme



#### OPTIONS FOR CONNECTING TURNSTILES, GATES, LOCKS AND BARRIERS TO CT/L04 CONTROLLER



## PERCo-Web SOFTWARE

PERCo-Web provides a possibility to construct an access control system that fits all requirements of an office, a company or a business-centre.

Insert IP-address into the address bar to get access to the PERCo Web-interface.

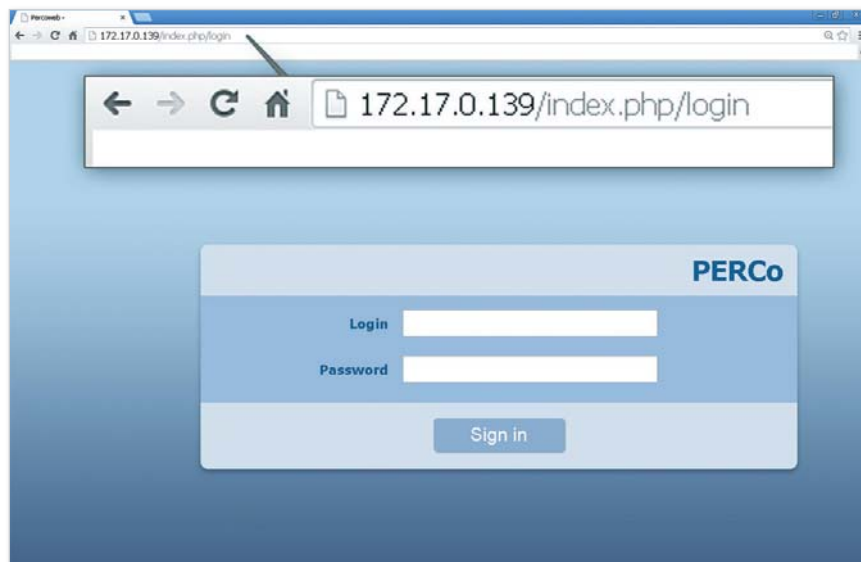


Fig. IP-address

PERCo-Web software allows users to operate remotely in the following sections:

- Staff
- Access control office
- Time & Attendance
- Access control
- Verification
- Cards ordering
- Administration

### Section: Staff

«Staff» module allows to maintain data of employees and departments, create and edit work schedules, assign access rights to employees.

Fig. Employee record card



The PERCo-Web can store various text and image information of employees. Images can be downloaded both from IP-camera and from a file.

Each employee is assigned with access schedule for the secured area and work schedule for labor discipline and T&A control.

Work schedules are also set in this section. The system supports setting of week and shift work schedules.

The screenshot shows the 'Schedule setting' interface. At the top, there's a 'Schedule title' field with the value 'for marketing' and a 'Description' field. Below these are 'Schedule type' (set to 'Week') and two checkboxes: 'Ignore holidays' and 'Consider only the first and last exit'. There are three tabs: 'Intervals' (selected), 'Recording space', and 'Report Settings'. The 'Intervals' tab displays a timeline for Monday, Tuesday, and Wednesday. Each day has a timeline from 09:00 to 17:45 with a break from 11:20 to 14:50. The 'Working time' is shown as 05 h 15 m for Monday and Tuesday, and 08 h 00 m for Wednesday. A 'Constant' field is also present for each day. A 'Save' button is at the bottom right.

Fig. Setting of work schedules

When organizing work schedules the system takes into account such features as: transition of schedule through 0-00, additional breaks and lunch breaks, support of flextime schedules, etc.

## Section: Access control office

The main goal of this section is to organize access to the facility for employees and visitors. The system can create access algorithms of different complexity, depending on requirements of users.

An employee or a visitor receives an access card with assigned access rights to gain access to the secured area. According to security requirements of the facility the system can set various access algorithms:

- Access limitation according to time and areas
- Verified access – access is granted by a security guard upon identification of employee. The employee is identified by the security guard who checks his photo on the display
- Double-check access – access is granted on «two persons» principle. The access for the card that is set to be «subject to double-check» is granted only when the second (double-check) card is presented.
- Access with a right for an employee to arm security of the area
- Control of several passages with one card («Antipassback» function).

Visitors receive single-passage access cards. These cards can be collected at the exit with the use of card capture readers.

This section provides visitor recording. Administration of the enterprise can check necessary information on visitors who visited any department.

Besides that «Access control office» section provides a possibility to create patterns for card issuing in the form of badges with photos, names and other information.

## Section: Cards ordering

The module allows managers and other authorities to remotely order access cards for expected visitors in advance.

System user (manager or access control office operator) enters main data of the visitor. Information on ordered access card is automatically shown in «Access control office» section, «Ordered access cards» tab. When the visitor comes to the check-point, the operator just needs to check data and issue a temporary access card.

**Visitor information**

Last name: Johnson

First name: Emily

Middle name:

Supporting document: passport

Division: marketing

Accompanying person: John Smith

Valid from: 2014-10-07 00:00:00

Valid until: 2014-10-07 12:39:17

Photo:

Save

Fig. Visitor Information

## Section: Time & Attendance

The section is designed to control labor discipline of employees and register their work hours.

Parameters for registering are set in «Staff» section.

«Time & Attendance» section provides following reports:

Time & Attendance:

- On worked time
- On non-worked time
- On overtime
- On balance (difference between time worked according to schedule and time of employee's presence at work)

Labor discipline:

- On time of presence/absence
- On employees that are present/absent at the moment
- On location of employees

Pers. Number	Employee	Division	Position	Late-in	Early-out	Absence	No. of late-in events	No. of early-out events	No. of absences	Absence time
1	Anderson Tom	CNB Company	General Manager	00:00	06:00	00:00	00:00	00:00	1	06:00
4	Barker Susan	CNB Company	Chief accountant	00:00	06:00	00:00	00:00	00:00	1	06:00
10	Braun David	CNB Company	HR manager	00:00	08:00	00:00	00:00	00:00	1	08:00
3	Carter Julie	CNB Company	Accountant	00:00	06:00	00:00	00:00	00:00	1	06:00
2	Ferris Will	CNB Company	Sales director	00:00	08:00	00:00	00:00	00:00	1	08:00
8	Jenkins Jim	CNB Company	IT administrator	00:00	05:15	00:00	00:00	00:00	1	05:15
7	Smith Tom	CNB Company	Senior PHP Developer	00:00	06:00	00:00	00:00	00:00	1	06:00
9	Scott Robert	CNB Company	Technical director	00:00	08:00	00:00	00:00	00:00	1	08:00
6	Smith Mark	CNB Company	Salesman	00:00	08:00	00:00	00:00	00:00	1	08:00
5	Sommers Frank	CNB Company	Salesman	00:00	08:00	00:00	00:00	00:00	1	08:00

Fig. T&A Reports

## Section: Verification

This section is designed for organizing of workplace for security service operator, it provides a possibility to identify the owner of the card by comparing the face of entering employee or his/her image from a video camera installed at the entrance with the photo of the owner from the database. On the basis of this comparison the security service operator decides whether to grant or deny access.

Later the system can provide a report based on verification events.

## Section: Access control

This section is designed for creation of reports based on various data for security service and system administrators. The system can create the following reports:

- based on access parameters of employees/visitors to various rooms
- based on passages of employees and visitors
- based on verification events
- based on device events

Also the system allows the user to operate system devices in on-line mode.

## Section: Administration

This section is designed for operation of security system administrator.

Main functions of the section:

- Equipment configuration
- Reports on system events
- Design of facility's rooms
- Access of system users

## BASIC ACCESS CONTROL SOLUTIONS

### Time and Attendance control solutions for enterprises

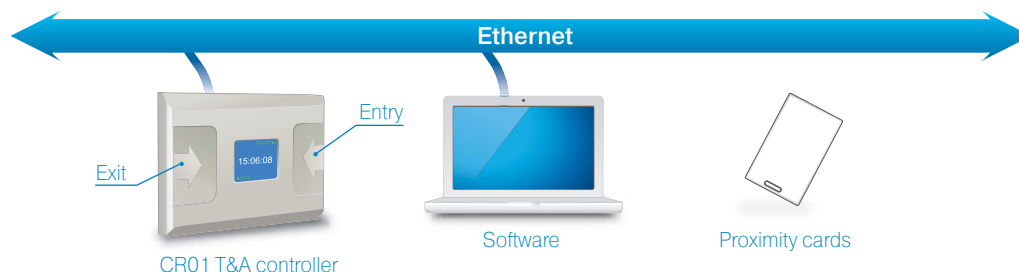
You can manage your Time and Attendance control system using the ACS equipment that is already installed in the facility – for example you can use a turnstile and a lock and 2 card readers (for entry and for exit) – or it can be managed with the specially designed PERCo-CR01 T&A controller.

Below you can find the description of both of these options for organizing the T&A control system at the enterprise.

#### T&A control system without lock or turnstile in a small enterprise without entrance check-point

The installation of the Ethernet connected PERCo-CR01 controller (LICON) with two built-in card readers and a real time clock provides the simplest solution for the T&A control.

PERCo-CR01 controller (LICON)	1 unit
Proximity card	According to the number of users



Employees have to present their cards to the controller upon arriving to work and leaving from it. When the card is presented to the controller, the system identifies the employee and records the time of his entry/exit. The Software permits to compare the real time when the employee was present in the workplace with his individual work schedule and forms the necessary reports, for example the report on labor disciplinary violations. The intellectual control algorithm sustains the flextime and shift work schedules. If it is necessary a responsible employee can input justificatory documents data into the system.

The LCD screen displays the system time so the employee that presents the card to the controller can see what time of entry/exit will be indicated in the reports.

The controller also informs about double or incorrect card presentation.

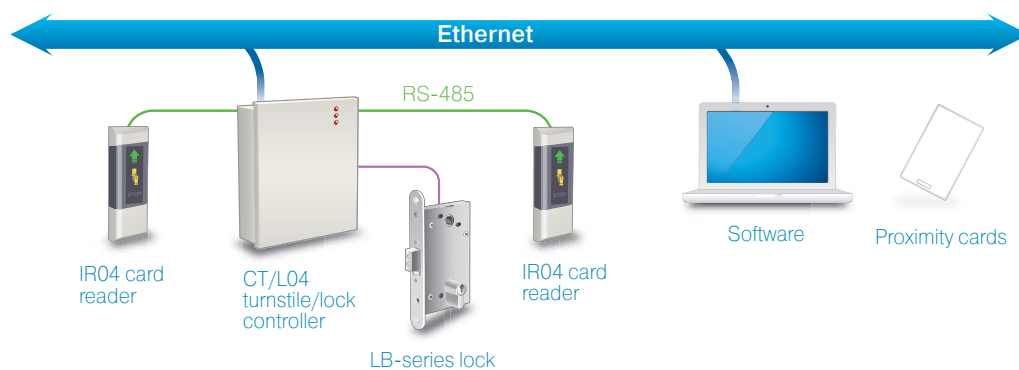
#### T&A control system based on turnstile or lock

If the enterprise is already provided with access control system, the equipment that is already installed can be used for T&A management – IP-stiles, turnstiles, locks, controllers and readers. When the system is used at a large enterprise, it might be more efficient to organize T&A system not at the check-point, but at the departments and other rooms, by installing T&A controllers at the entrances.

#### Example 1.

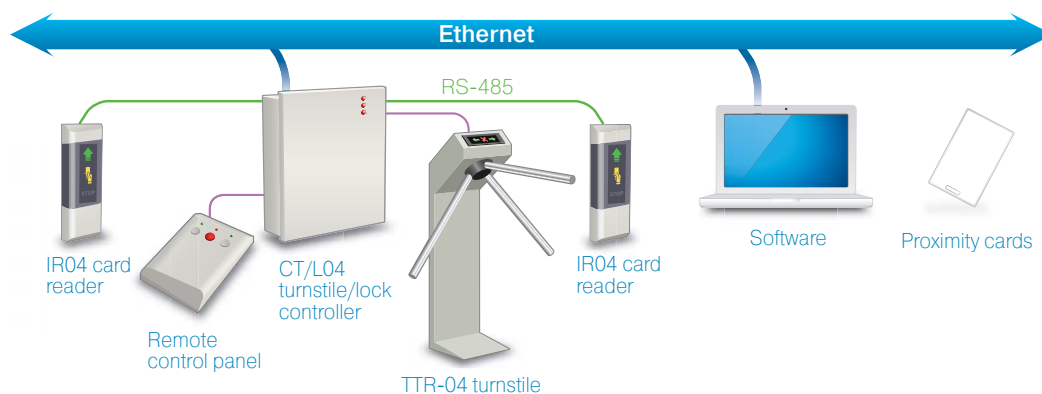
Electromechanical lock	1 unit
CT/L04 turnstile/lock controller	1 unit
IR04 card reader	2 units
Proximity cards	According to the number of users





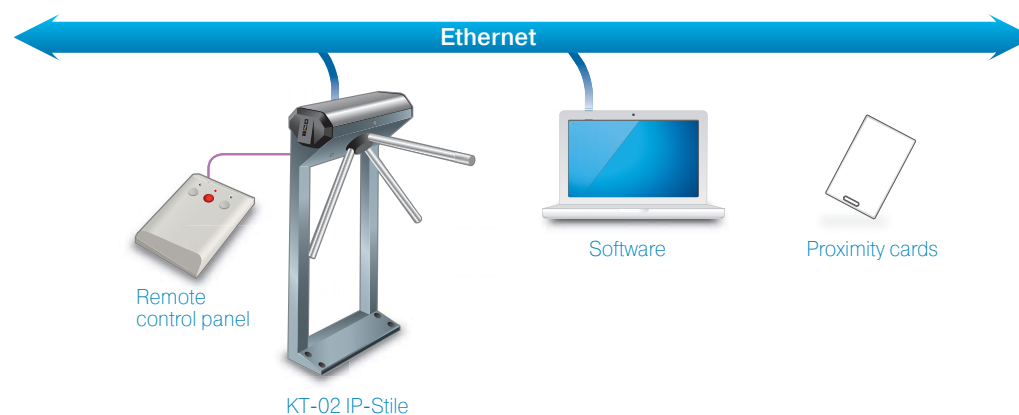
**Example 2.**

PERCo turnstile	1 unit
CT/L04 turnstile/lock controller	1 unit
IR04 card reader	2 units
Proximity cards	According to the number of users



**Example 3.**

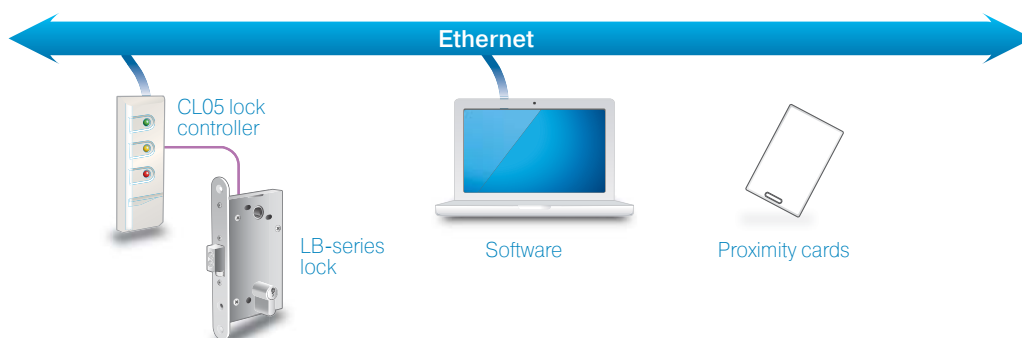
PERCo IP-Stile	1 unit
Proximity cards	According to the number of users



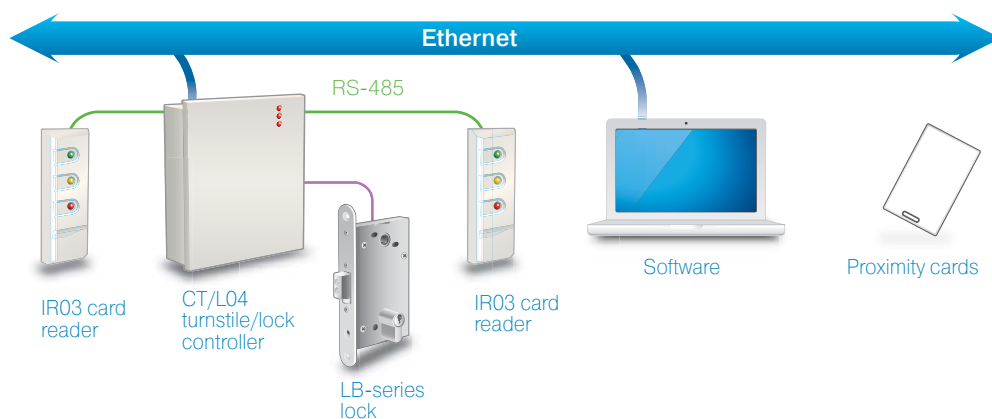
## Single door access control system

Single door access control system can be used with entrance doors and emergency exit doors, office and staff room doors. The main objective of the system is to prevent unauthorized access. Depending on the door location you can arrange both one-way and bi-directional control.

ONE-WAY CONTROL	
CL05 lock controller with built-in card reader	1 pcs
LB-series electromechanical door lock	1 pcs
Software	1 pcs
Proximity cards	According to the users number



BI-DIRECTIONAL CONTROL	
CT/L04 turnstile/lock controller	1 pcs
IR03 card reader	2 pcs
LB-series electromechanical door lock	1 pcs
Software	1 pcs
Proximity cards	According to the users number

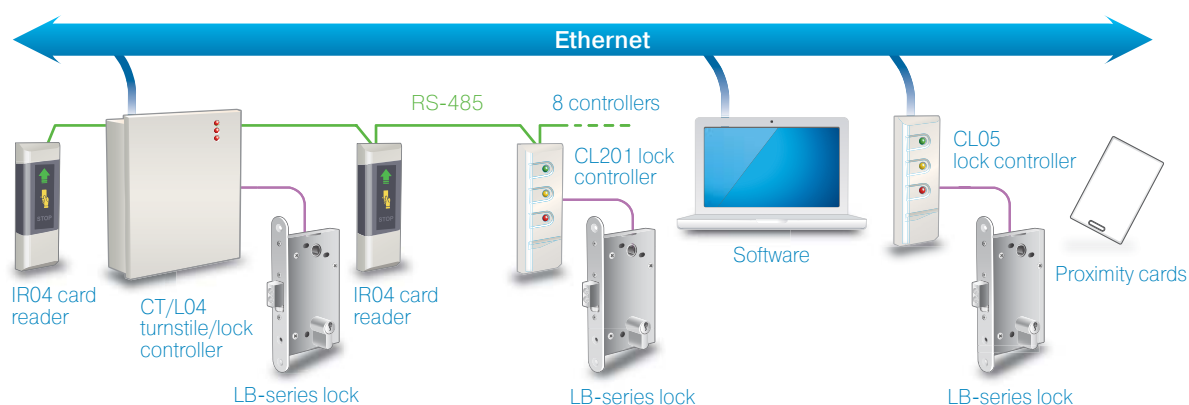


Users card list is stored in controller memory with the software. All events - inputs and outputs - are stored in the controller's memory. To upload a card list of employees or make changes, you can use a controller web-interface with a laptop.

## Several doors access control system

Consider the access control system for a company that occupies a floor in the business center, moreover, has one more room on another floor. Access control for 8 rooms, in/out control for floor entrance and separate room access control should be organized here.

CL05 lock controller with built-it card reader	1 pcs
CT/L04 turnstile/lock controller	1 pcs
CL201 lock controller with built-it card reader	8 pcs
IR04 card reader	2 pcs
LB-series electromechanical door lock	10 pcs
Software	1 pcs
Proximity cards	According to the users number



All doors should be equipped with electromechanical locks.

8 room doors are equipped with CL201 controllers with built-in readers. Door that leads to the floor is equipped with two IR04 card readers. Card readers and CL201 lock controllers with integrated readers are connected to CT/L04 universal controller and locks are connected to CT/L04 and CL201 controllers.

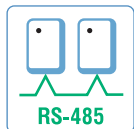
Separate room door is equipped with CL05 controller with built-in reader.

CT/L04 and CL05 controllers connect a software installed on a computer via Ethernet. The software allows you to create employees lists, assign access rights and view the event log.

## LIST OF SYMBOLS



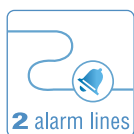
Ethernet communication interface



RS-485 communication interface



Number of controlled locks



Number of controlled alarm lines



Number of card holders (proximity cards)



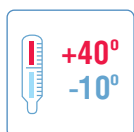
Number of events in the event log



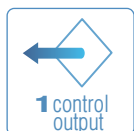
Number of readers



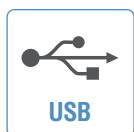
Operating voltage



Operating temperature range



Number of control outputs



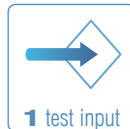
USB connection



Number of controlled directions



Number of controlled turnstiles



Number of test inputs



Power consumption



Throughput rate



Motor drive



Key override control



Automatic anti-panic



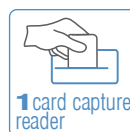
Mechanical anti-panic



Proximity card types



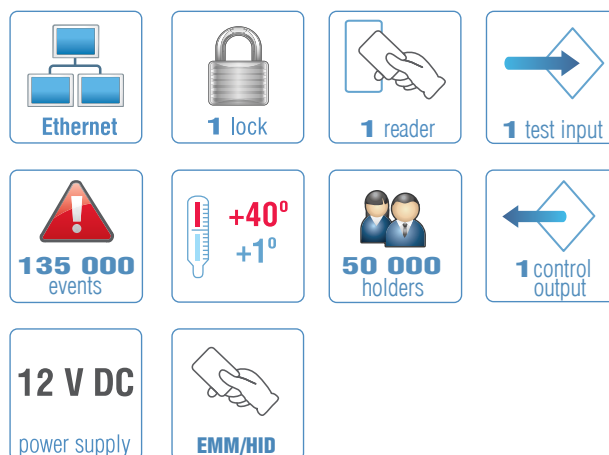
Wheel-chair access



Card capture reader



## CL05 LOCK CONTROLLER WITH BUILT-IN CARD READER



### Application

The CL05 lock controller is designed to control one electromechanical or electromagnetic lock.

The CL05 combines a controller for access control and a proximity card reader.

### Features and Benefits

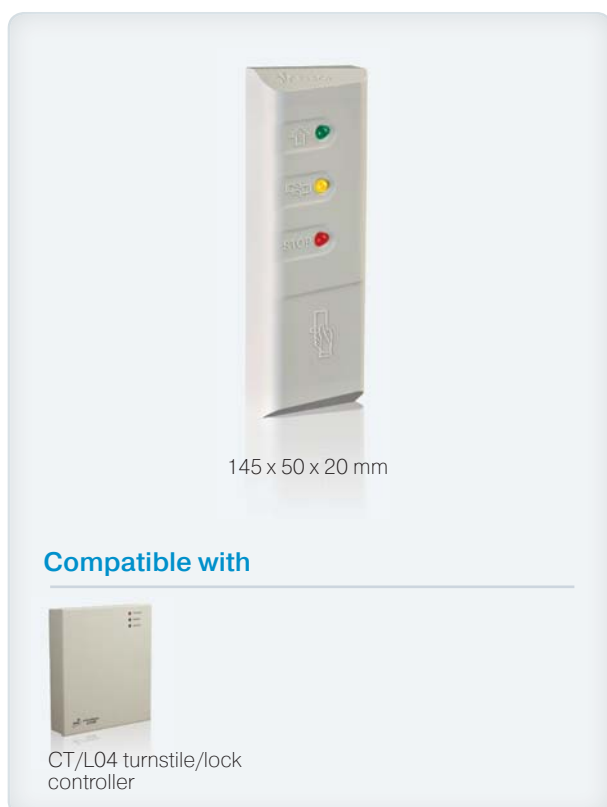
The CL05 provides a cost effective solution for door access control inside office premises.

The operation mode («Open», «Control», «Security», «Closed») is displayed by three LED indicators located near the relief pictograms on the front panel of the controller.

The device setting and control are effected through PERCo-Web web-interface.

The controller operation modes can be set with the access card or through web-interface.

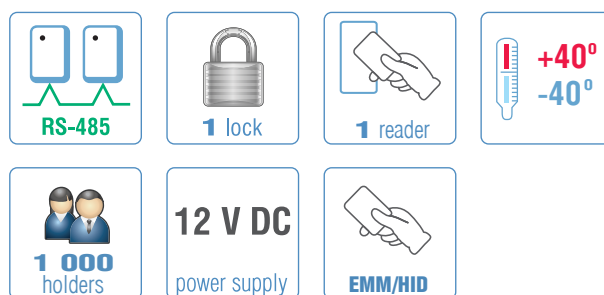
## CL201 LOCK CONTROLLER WITH BUILT-IN CARD READER



### Compatible with



CT/L04 turnstile/lock controller



### Application

The CL201 lock controller is designed to control one electromechanical or electromagnetic lock.

### Features and Benefits

The CL201 lock controller is provided with built-in card reader for HID and EM-Marlin proximity cards, that helps to facilitate the assemblage and maintenance.

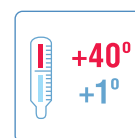
The CL201 controller is connected to CT/L04 turnstile/lock controller (it supports connection to up to eight CL201 controllers).

In case of a connection loss with a CT/L04 controller the CL201 controller keeps in memory the emergency list of 128 cards, but it doesn't keep the events in its own memory.

The controller protection from environmental exposures is ensured by covering its board with compound.



## CR01 TIME & ATTENDANCE (T&A) CONTROLLER



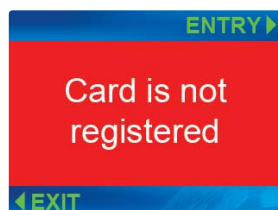
Standby mode



Name of card owner and time of card presentation



Card is presented with time violation



Card is not in the list



Card is presented repeatedly



Card is presented repeatedly

### Application

The CR01 (LICON) is a specialized controller designed to create Time and Attendance terminal and to exercise labour discipline control.

### Features and Benefits

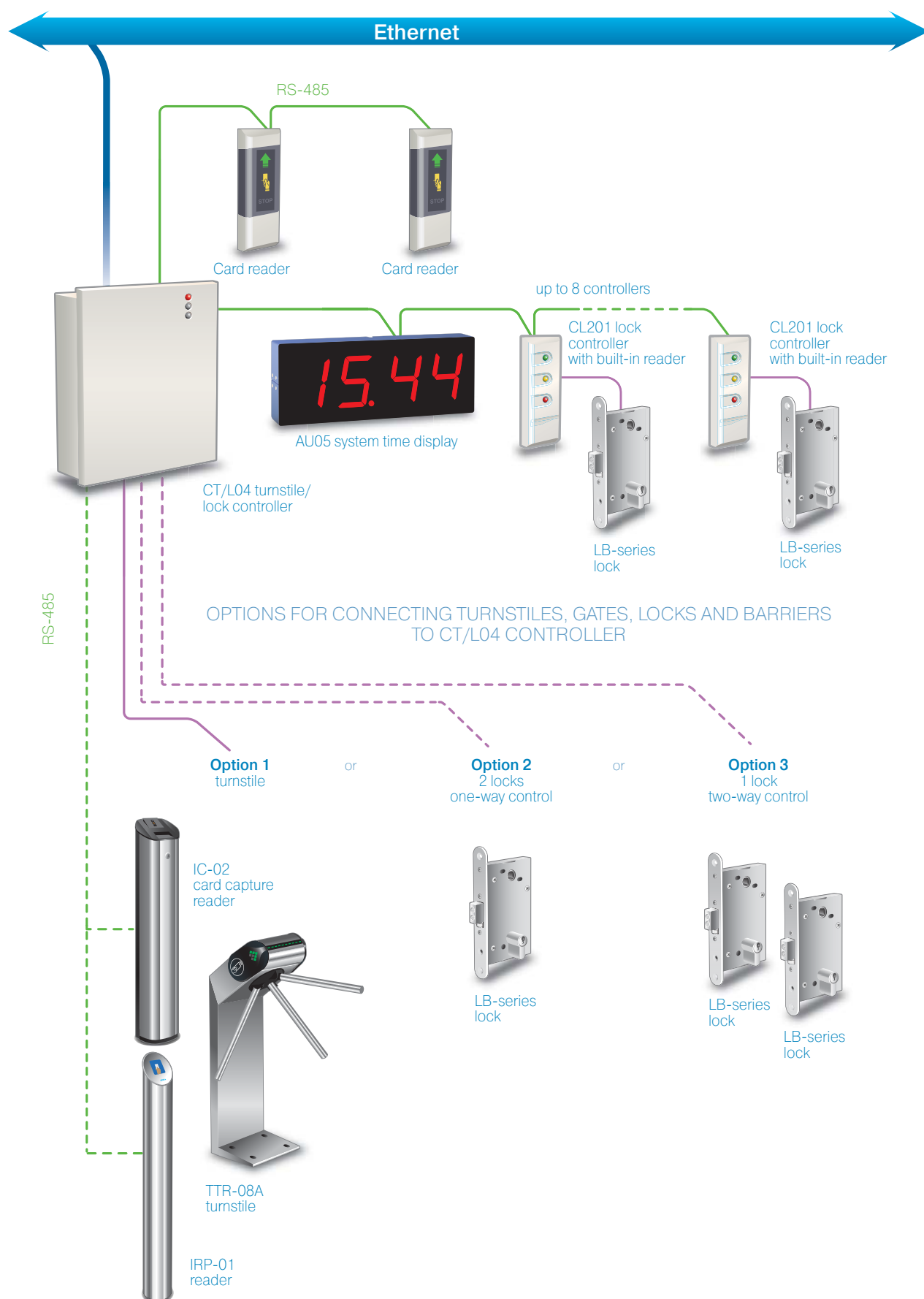
The LICON represents a perfect solution when it is appropriate to control the entry and exit time of the employees not at the entrances equipped with turnstiles but in other specifically allotted places. It can be for example an office without a turnstile at the entrance or, on the contrary, a big enterprise where the employee's working place is distant from the entrance. In such cases the LICON terminals can be installed in workshops or in other rooms where the working places are located. The LICON can operate as a stand-alone system or as a part of PERCo-Web system.

The CR01 controller has two built-in proximity card readers for the entry and exit registration. The places for card presentation are signed with pictograms. On the controller front panel there is an LCD screen. Each employee presents a proximity card at the LICON terminal upon arriving to work and leaving from work. The controller transmits the entry and exit time to the software, that forms the time sheet and other reports on labor disciplinary violations - late-in and early-out entries, unauthorized absence - on the basis of data received.

In the waiting mode the LCD screen displays the current time and indicates positions of the card readers for entry and for exit registration.

When the proximity card is presented by the employee the LCD screen displays the name of card holder, the card number and the time of card presentation. Time violations (for example, late-in and early-out events) are indicated with red color and are accompanied by auditory indication.

## Controller connection options





## CT/L04 TURNSTILE/LOCK CONTROLLER



205 x 235 x 58 mm

### Compatible with



CL201 controller



IR03 card reader



IR04 card reader



AU05 system time display



IR-10 long range card reader



IRP-01 Card capture reader



IC-02 Card capture reader



Ethernet



2 locks



1 turnstile



2 way control



2 readers



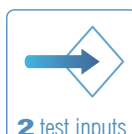
50 000 holders



135 000 events



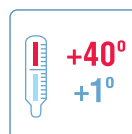
2 alarm lines



2 test inputs



4 control outputs



+40°  
+1°



12 V DC

power supply

### Application

The CT/L04 controller can control one turnstile/gate or one lock (two-way passage control) or two locks (one way passage control).

### Features and Benefits

The CT/L04 universal turnstile/lock controller operates through Ethernet interface, and supports connection through RS-485 interface of the following devices:

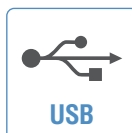
- up to two IR03 or IR04 card readers;
- up to eight CL201 lock controllers (each CL201 controller is fitted with a built-in card reader and controls one lock)
- AU05 system time display

The device setting and control are effected through PERCo-Web web-interface.

## IR05 USB PROXIMITY CARD READER



145x45x23 mm

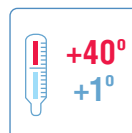


USB



5 V DC

power supply



+40°  
+1°



EMM/HID

### Application

IR05 USB proximity card reader is designed for automatic input of proximity card number into PERCo-Web system software.

The reader is connected to the computer via USB-port and operates with EMM/HID cards.



IR04 proximity card reader



IR03 proximity card reader



## IR04 PROXIMITY CARD READER



145 x 50 x 20 mm

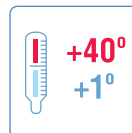
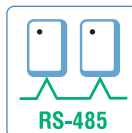
### Compatible with



CT/L04 turnstile/lock controller

**12 V DC**

power supply



### Application

The IR04 proximity reader is designed for reading and decoding the code logged into the proximity card and its transfer to the controller of PERCo system operating device.

### Features and Benefits

The IR04 reader is used for site access control and operates together with the lock controller or turnstile controller.

The elegant design of the IR04 makes it a perfect solution for executives offices, conference rooms.

Card reading distance for EM-Marin cards – 10 cm,  
for HID cards – 7 cm.

## IR03/IR07 PROXIMITY CARD READERS



145 x 50 x 20 mm

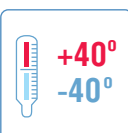
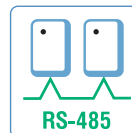
### Compatible with



CT/L04 turnstile/lock controller

**12 V DC**

power supply



### Application

The IR03 and IR07 proximity readers are designed for reading and decoding the code logged into the proximity card and for its transfer to the controller of PERCo system operating device.

### Features and Benefits

The IR03 and IR07 readers are used for site access control and operate together with the turnstile/lock controller.

The operating temperature range of the readers allows using them outdoors.

The IR03 proximity reader is designed for operating with EMM/HID proximity cards.

Card reading distance for EM-Marin cards – 10 cm, for HID cards – 7 cm.

The IR07 proximity reader is designed for operating with ISO 14443 Mifare proximity cards.

Card reading distance for Mifare cards – 6 cm.



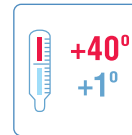
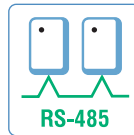


IRP-01 reader post with LCD display



AU05 system time display

## IRP-01 READER POST WITH LCD DISPLAY



### Application

The IRP-01 reader post is an elegant solution designed to read proximity cards and to display the information if the access is denied or granted.

The IRP-01 can be applied as a part of PERCo-Web system or can be integrated in the systems of other manufacturers. The IRP-01 operates through two types of interfaces – RS-485 or Wiegand, the output format must be selected and set at the time of installation.

### Design

The radio-transparent top cover is made of glass. Under the top cover there are a reader control board and an LCD display with animated indication of operational modes.



Control



Open



Closed



Verification process

Card reading distance for EM-Marine cards – not less than 7 cm, for HID cards – not less than 6 cm. The card reading is confirmed by an audible signal.

### Materials and Finishes

Card reader post – stainless steel

Top cover – tempered glass

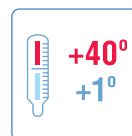
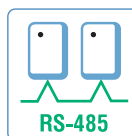
## AU05 SYSTEM TIME DISPLAY



### Compatible with



CT/L04 turnstile/lock controller



### Application

The AU05 system time display is designed to indicate the system time according to which the present system makes the decision if the access is denied or granted and this system time is indicated in all the event lists.

### Features and Benefits

The display is used for indication of the system time that forms the basis of employees' working time calculation. At the moment of card presentation at the entrance the employee will be able to see what time will be listed in his time sheet.

Height of numerals – 101,6 mm

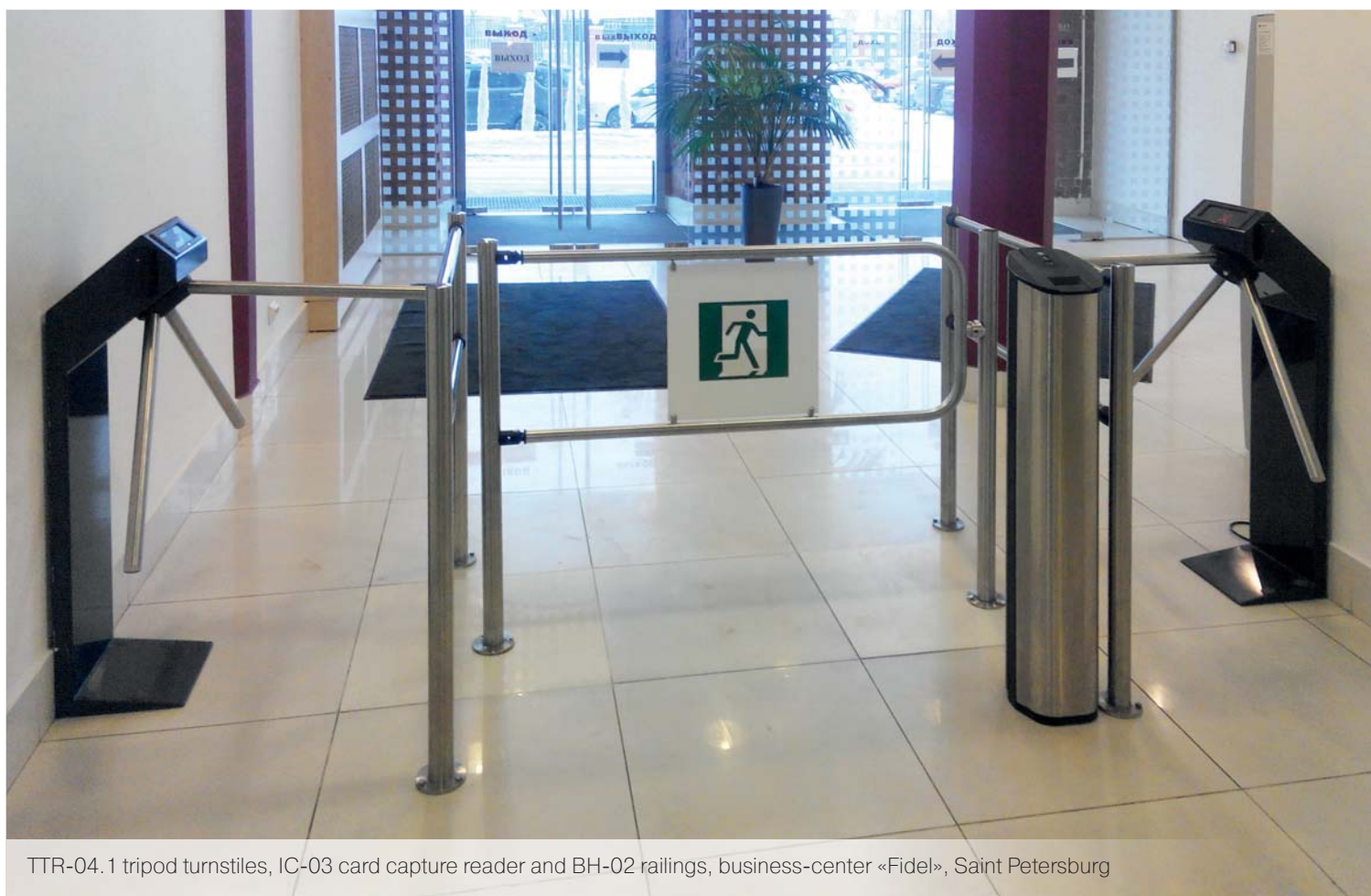
Typical brightness for red light – 60-130 mcd

Look angle – not less than 150°





ST-01 speed gates and IC-02 card capture reader, business-center «CITYCENTER», Novosibirsk



TTR-04.1 tripod turnstiles, IC-03 card capture reader and BH-02 railings, business-center «Fidel», Saint Petersburg

## IC-02 CARD CAPTURE READER

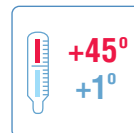
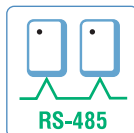


194 x 194 x 1017 mm

### Compatible with



CT/L04 turnstile/lock controller



### Application

The IC-02 card capture reader is designed to capture the guests cards. The IC-02 also supports reading of personnel cards without capturing.

### Design

The IC-02 card capture reader is used to capture and store guest cards, when visitors are required to return the card upon leaving the facility, and also can be used as a regular reader for personnel permanent cards.

The card capture reader operates with HID and EM-Marlin cards.

One of advantages of the PERCo card capture reader is that the card container with cards can be easily extracted.

The card capture reader can be connected to a turnstile controller and to an operating device – a turnstile or gate.

Capturing guest cards

Reading personnel cards

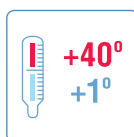
### Materials and Finishes

Housing – stainless steel

Card reading distance for EM-Marlin cards – 8cm, for HID cards – 6 cm.

The card container capacity – 350 cards

## AC02 CONVERTER



### Application

The AC02 converter is designed for connection to the controller CT/L04 of up to 2 readers through Wiegand-26 Interface (or Wiegand 34, 37, 40, 42).

### Features and Benefits

The converter ensures:

- data reception from two readers via Wiegand Interface (Wiegand-26, 34, 37, 40, 42) and transmission of these data to the controller via RS-485;
- control of LED indicators of 2 readers by the commands of the controller via RS-485

There are 2 versions of the converter – with or without housing.

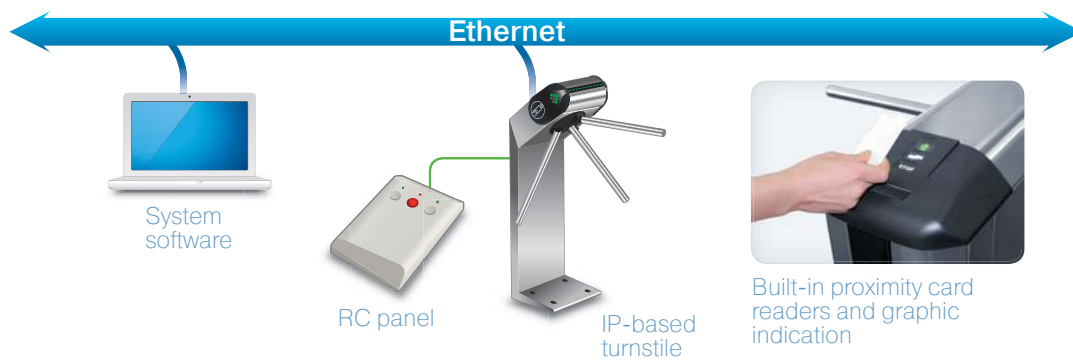


## PERCo IP-Stiles

PERCo IP-Stiles are designed as a complete access control system (ACS), as standard including hardware and software that enables you to arrange controlled access to a facility by proximity cards.

IP-Stile standard package includes:

- a turnstile (type chosen by a Client at the time of order)
- 2 built-in proximity card readers
- a built-in controller
- PERCo software.



## PERCo IP-Stile software

PERCo IP-Stiles, based on a tripod turnstile, box tripod turnstile or a waist-high rotor turnstile can be operated:

- by SL-01 software (basic single-user software supplied with a standard delivery set)
- by SL-02 software (software with video verification, optional)
- through a web-interface (free of charge).

### SL-01 software

SL-01 is basic software supplied in a standard delivery set with all IP-Stiles, allowing for basic functions such as:

- administration of employee lists (full names);
- issue of access cards;
- access rights assignment under authorized/non-authorized principle;
- setting and change of access modes;
- hardware configuration;
- database event logging with data exportable, e.g. to an Excel file.

PERCo-SL01, version 5.1.1.2

File View Edit Access Settings Help

Employees Configuration Events Verification

Events from 10.02.2009 until 12.03.2009

Date	Time	Device	Event	Facility Code	Number	Full Name
12.03.2013	15:17:36	Reader 1	Refusal to access	1	31	Kevin Johnson
12.03.2013	15:17:08	Reader 1	Refusal to access	1	33	Samanta Johnson
12.03.2013	09:48:03	Controller	Device sound is OFF			
12.03.2013	09:48:28	Controller	Connection reactivation			
12.03.2013	09:48:26	Controller	Controller restart (WatchDog)			
12.03.2013	09:48:00	Controller	Power recovery			
12.03.2013	09:48:00	Controller	Power-up			
11.03.2013	10:56:45	Controller	Power-down			
11.03.2013	10:56:07	Controller	Device sound is OFF			
11.03.2013	10:56:05	Controller	Connection reactivation			
11.03.2013	10:56:03	Controller	Controller restart (WatchDog)			
11.03.2013	10:46:20	Controller	Device sound is OFF			
11.03.2013	10:45:14	Controller	Connection reactivation			
11.03.2013	10:45:12	Controller	Controller restart (WatchDog)			
11.03.2013	10:38:25	Controller	Connection reactivation			
11.03.2013	10:37:39	Controller	Controller restart (WatchDog)			
11.03.2013	10:34:54	Controller	Device sound is OFF			
11.03.2013	10:34:50	Controller	Power-up			

Controller Controller Access Control

IP address 10.0.1.60 Subnet mask 255.0.0.0 Gateway 0.0.0.0 MAC-address 00:0b:3c:00:6a:f8

Screenshot of event list



## SL-02 software

SL-02 software with video identification enables to prevent unauthorized use of valid ID cards that have been lost, stolen or otherwise improperly obtained. The entrant's face can be checked against the card holder's photo from the database which appears on the screen when the card is presented.

Additionally to the functions provided by the SL-01 basic software, SL-02 allows for:

- real-time capture of dynamic video image;
- employee and visitor identification and verification by means of photo and video frame images.



Sample screenshot of video identification

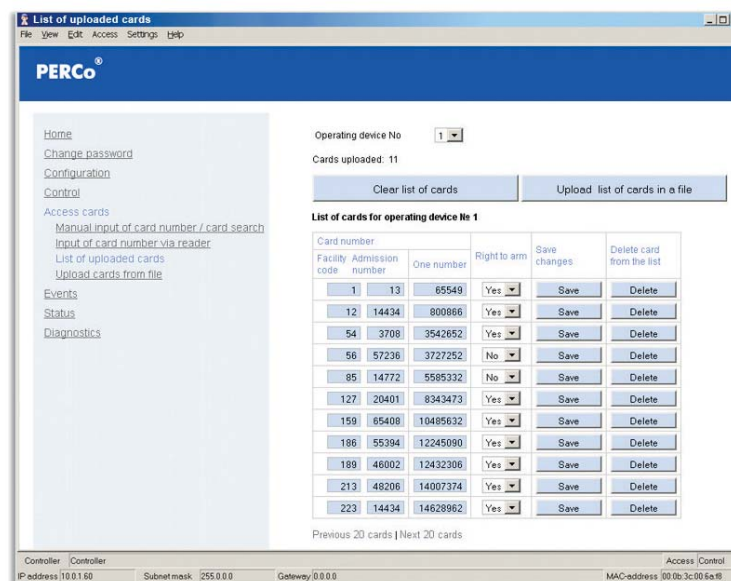
## Web-interface

Web-interface allows operation of the IP-Stiles remotely without installation of any software.

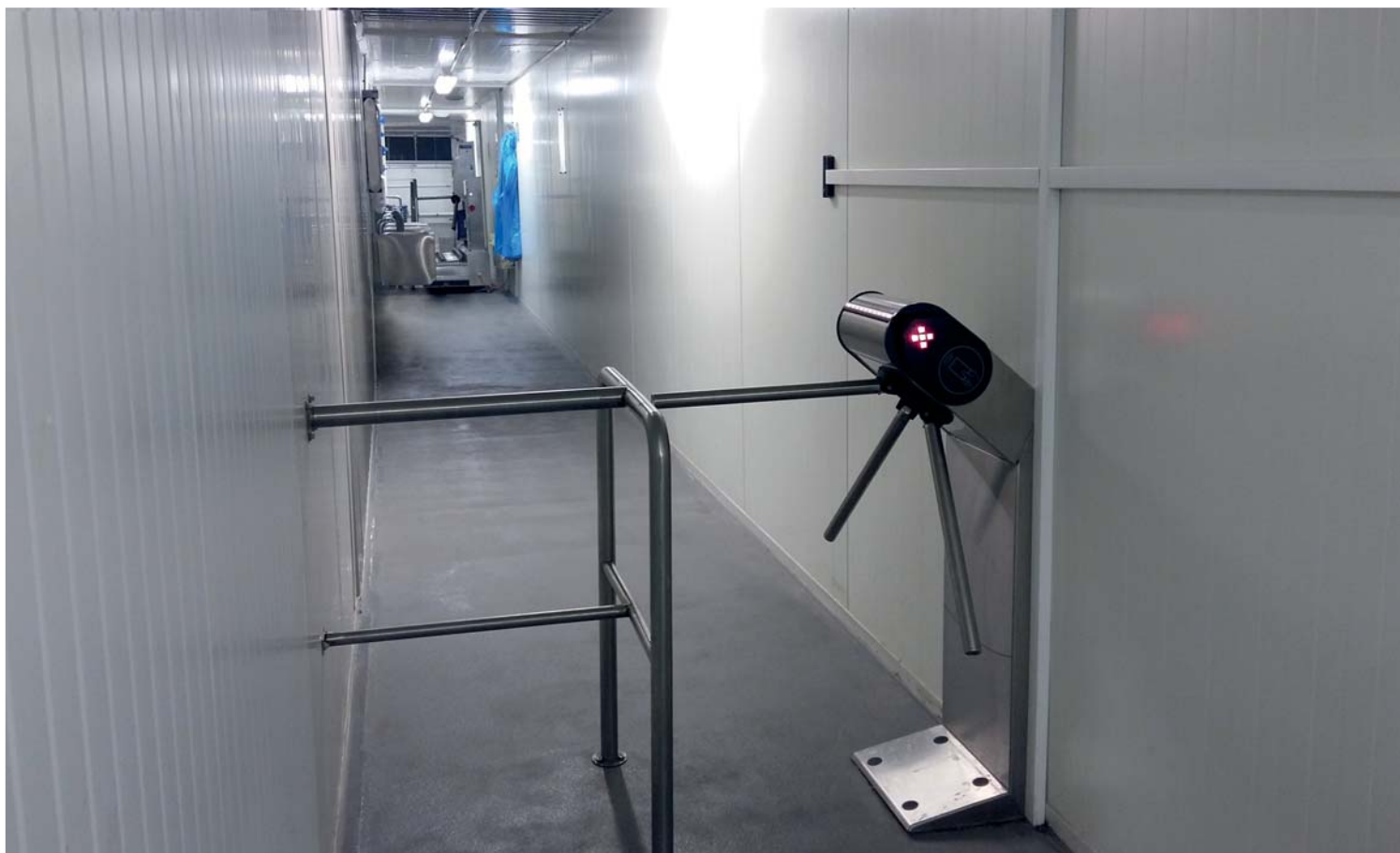
In order to access the web-based interface of a controller, the IP-address of the controller should be inserted in the URL bar of a browser. Access is protected with a password.

Using the web-based interface enables you to:

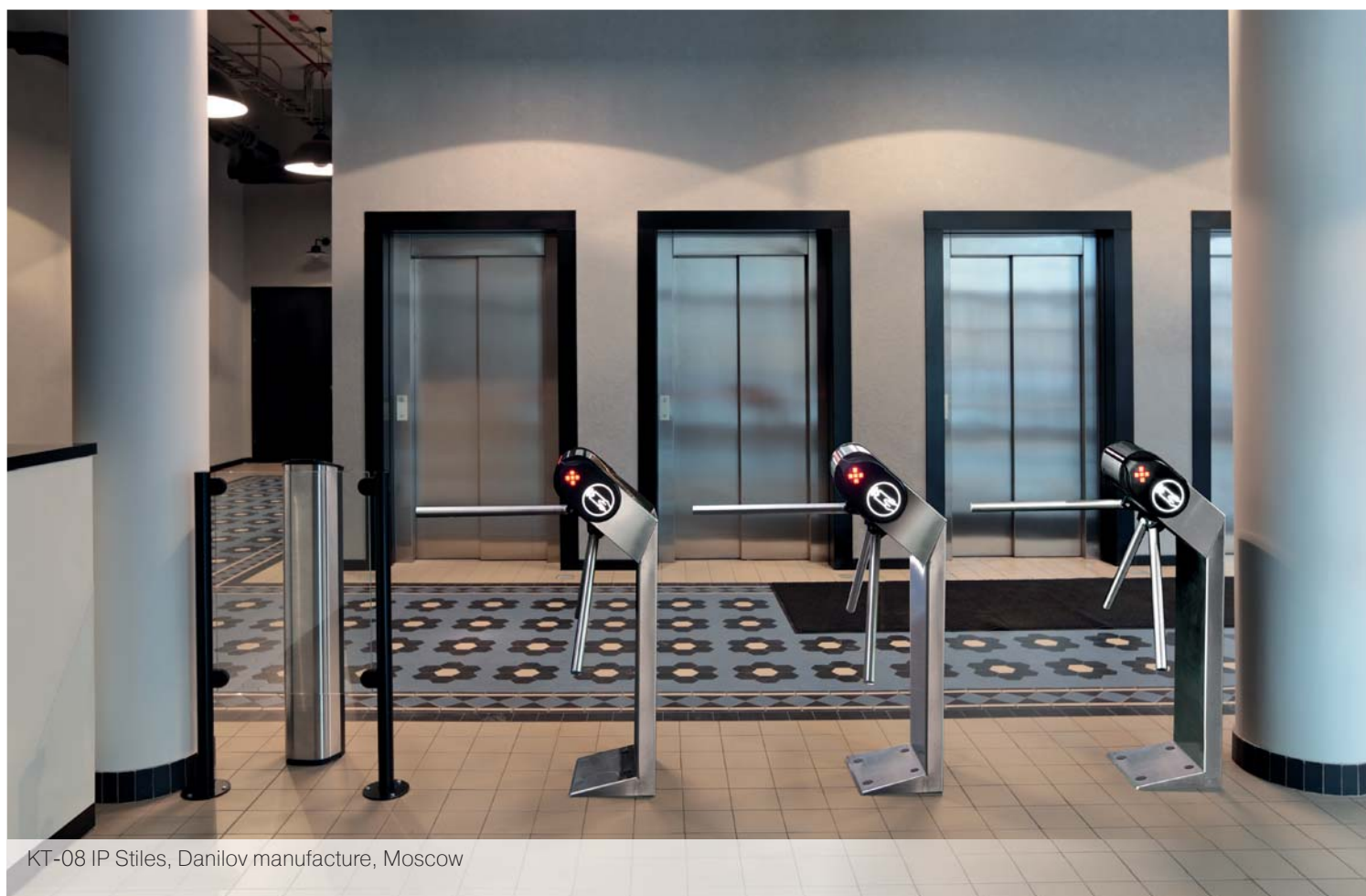
- run a test and do settings of all controllers;
- view the event log of a selected controller, track number of passed cards as well as time of passes;
- load, view and revise lists of cards.



Screenshot of web-interface



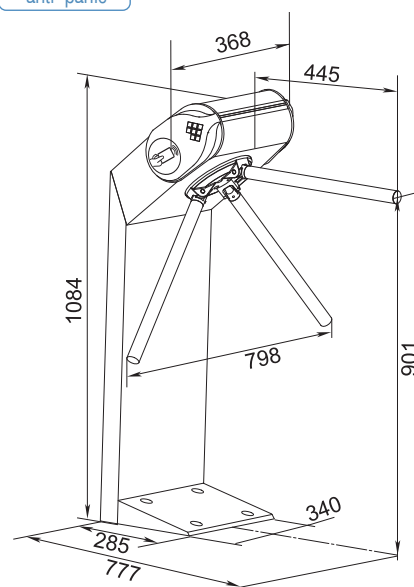
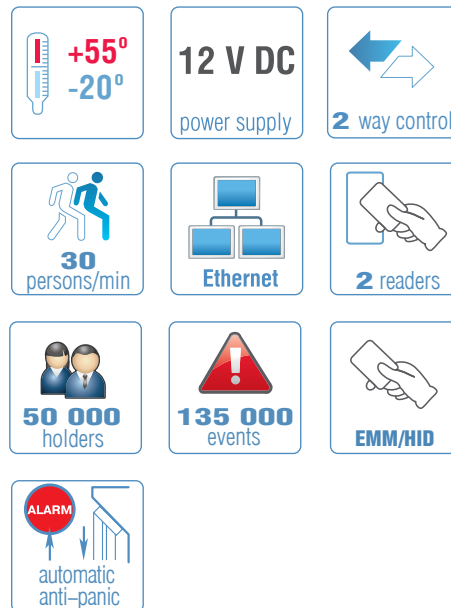
KT-08 IP Stile, Plunge Vilciunai Group, Kaunas, Lithuania



KT-08 IP Stiles, Danilov manufacture, Moscow

## KT-08A IP-STILE

NEW



### Application

IP-Stile can operate as a part of ACS.

Automatic «anti-panic» barrier arms enable immediate clear of the passage for urgent evacuation of people in emergency case. Emergency unblocking of the IP-Stile is performed by input of the Fire Alarm signal to the turnstile or in emergency power failure. At that the barrier arm automatically falls down ensuring free passage.

When power supply is restored or Fire Alarm signal is removed, the arm shall be manually set into operating position.

### Delivery set

The standard delivery set includes:

- IP-Stile
- ACS built-in controller
- two built-in proximity card readers (HID/EM-Marlin)
- remote control panel
- SL01 free single user software

KT-08.3A IP-Stile may be equipped with matching railings for optimized control of pedestrian traffic.

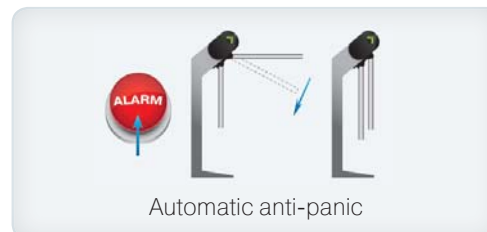
### Materials and Finishes

Turnstile housing – stainless steel

Barrier arms – stainless steel



Stainless steel



Automatic anti-panic



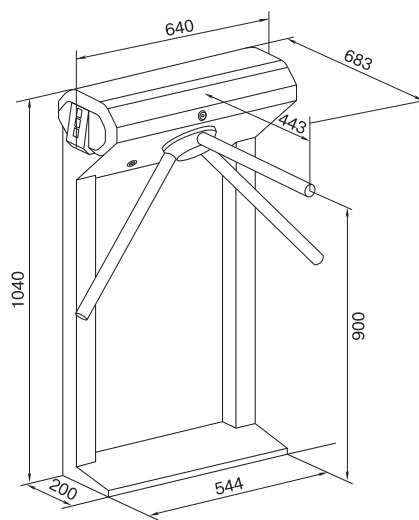
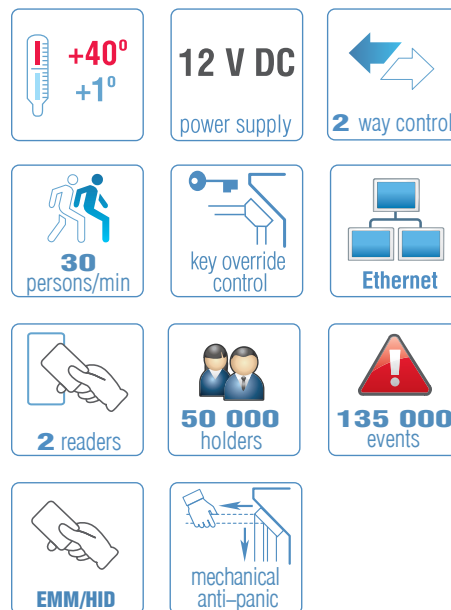


KT-02 IP-Stile, business-center "Rezon", Saint Petersburg, Russia



KT-02 IP-Stile, business-center "Prestige", Saint-Petersburg, Russia

## KT-02 IP-STILE



### Application

The KT-02 IP-Stile system is a turnkey solution to provide effective and secure access control at the rate of 30 persons per min.

Initial installation of the KT-02 IP-Stile is easy and fast: fix the turnstile to the floor with anchor bolts and connect it to a 12V power supply and the Ethernet network.

### Delivery set

The standard delivery set includes:

- turnstile with built-in access controller and two proximity card readers
- remote control panel
- standard/anti-panic barrier arms (the type is chosen by a Client at the time of order)
- SL-01 single-user software

For optimum control of pedestrian flow, the KT-02 IP-Stile can be supplied with matching railings.

### Materials and Finishes

Turnstile housing – powder coated steel. Sand-paper powder coating with pearl mica effect:



Dark grey

Top cover, barrier arms – stainless steel.



Stainless steel



Card reader, built-in



Mechanical anti-panic





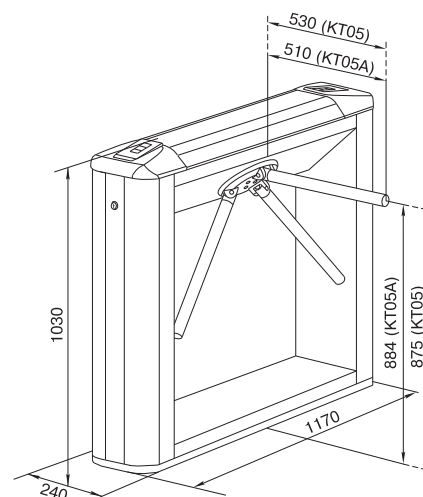
KT-05 IP-Stiles with BH railings, business-center «Quadroom», Moscow, Russia



KT-05 IP-Stiles with BH-02 railings, business-center «Baze», Saint Petersburg, Russia



## KT-05/KT-05A IP-STILE



### Application

The KT-05 IP-Stile is a turnkey hardware + software solution to provide effective and secure access control.

### Delivery set

- turnstile with built-in controller and two proximity card readers
- remote control panel
- standard/anti-panic barrier arms (the type is chosen by a Client at the time of order)
- SL-01 single-user software

### Design

With all the electronics, including card readers and a controller built-in, supplied with free single-user software the KT-05 IP-Stile is a complete one-stop solution for your entrance point. Smart design in stainless steel will be ideal for banks, office buildings, financial and educational institutions.

### Materials and Finishes

Turnstile housing/barrier arms – stainless steel.



Stainless steel



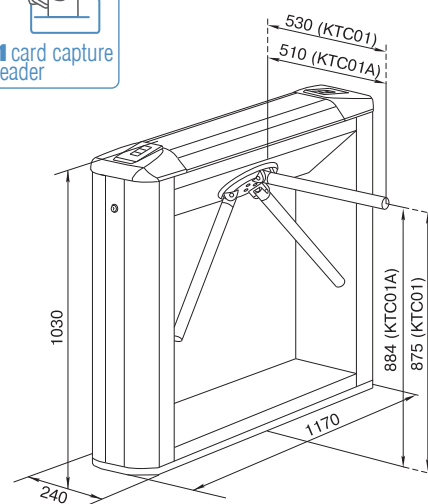
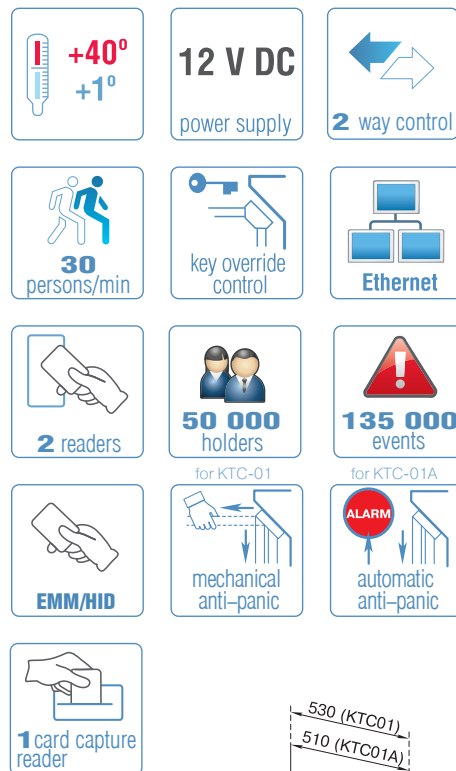


KTC-01 IP-Stiles, business-center «Mezon», Moscow, Russia



KTC-01 IP-Stile, Peterborough Regional College, Cambridgeshire, UK

## KTC-01/ KTC-01A IP-STILE



### Application

The KTC-01/KTC-01A IP-Stile is an effective and multi-functional turnkey solution that ensures the secure access control of personnel with permanent access cards and visitors with guest access cards. A guest card meant to return upon leaving the facility will be captured by the built-in card capture reader.

### Delivery set

- turnstile with built-in controller, two proximity card readers and a card capture reader (EMM/HID)
- remote control panel
- standard/anti-panic barrier arms (the type is chosen by a Client at the time of order)
- SL-01 single-user software

### Design

With nicely built-in card readers and a card capture reader supplied with free single-user software the KTC-01/KTC-01A is a complete one-stop solution that will save your time, expenses and installation efforts.

### Materials and Finishes

Turnstile housing/barrier arms – stainless steel.



Stainless steel



Automatic anti-panic



Mechanical anti-panic





WMD-06 swing gates, IRP-01 reader posts and IC-02 card capture reader, business-center «Imperial Park», Moscow



TB-01 box tripod turnstiles, BH-02 railings, business-center «Quadroom», Moscow

## PERCo turnstiles, gates & railings

PERCo turnstiles, gates and railing systems are used for control of pedestrian flows and access at a wide variety of settings including industrial, commercial and transport facilities, financial institutions, sports and leisure venues, etc.

The product family of entrance control products designed and manufactured by PERCo covers a wide range of security, dimensional and aesthetic requirements and includes:

- compact tripod turnstiles
- box tripod turnstiles
- waist-high rotor turnstiles
- waist-high swing gates
- full height rotor turnstiles
- full height security gates
- railing systems

Combined with access control systems, biometrical, ticketing, fire alarm or similar devices, PERCo entrance control products provide the level of security to meet even the most exacting requirements. A combination of elegant exterior, fast throughput and proven high reliability makes PERCo entrance control products a universal solution for entrances of buildings, offices, outlets, leisure and entertainment facilities.

PERCo turnstiles and gates can be supplied with matching railings which enables to form passageways of any desired configuration.



ST-01 speed gates, business-center «Hadvka Office Park», Prague



RTD-15 full height rotor turnstiles with RTC-15R canopies, FordSollers, Saint Petersburg, Russia

The hinged railing sections of rotary type are purpose-designed to provide unobstructed and fast escape routes in the event of an emergency, or for the disabled people.

Main features of PERCo turnstiles:

- stand-alone operation / operation as part of access control systems
- models for indoor and outdoor applications
- high throughput
- bi-directional passage control
- LED directional indication / status lights
- anti-panic folding arms
- safe supply voltage 12-36V
- key override control for emergency situations
- smooth reset of barrier arms after each passage
- simple installation with anchor bolts
- complete turnkey delivery set

With over 25 years expertise in the security industry, PERCo delivers products with high reliability and performance field-proven at tens of thousands of installations worldwide.

PERCo		Passage way width, mm	Turnstiles											
			Tripod					Box tripod						
			TTR-08A	TTR-04.1	TTR-04CW	TTR-07	T-5	TTD-08A	TTD-03.2	TTD-03.1	TB-01	TB-01A	TBC-01	TBC-01A
Barrier arms & swing panels	AS-05	500					✓							
	AS-04	600		✓	✓		✓				✓		✓	
	AA-04 anti-panic	600		✓			✓				✓		✓	
	AS-01	500							✓	✓				
	AA-01 anti-panic	500							✓	✓				
	automatic anti-panic	500	✓											
		550				✓		✓				✓		✓
	AGG-650	700												
	AGG-900	950												
	ASG-650	700												
	ASG-850	900												
	AG-650	700												
	AG-900	950												
	AG-1100	1150												
	swing panel	650/900												
	sliding panel	600/900												
Housing finishes & colors	R color (light beige)*			✓	✓									
	G color (dark grey)*			✓		✓			✓	✓				
	E color (black glitter with lacque)*			✓										
	Light grey*						✓							
	Dark blue													
	Stainless steel		✓					✓	✓	✓	✓	✓	✓	✓
Features (built-in)	Readers										✓	✓	✓	✓
	Card capture reader												✓	✓
	Controller													
	Software (free)													
	WEB-interface													
Appli- cation	Indoor			✓		✓	✓		✓	✓	✓	✓	✓	✓
	Outdoor		✓		✓			✓						
Drive	Motorized													
	Electromechanical		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Operation	Fail-safe (NO)		✓			✓		✓				✓		✓
	Fail-secure (NC)			✓	✓		✓		✓	✓	✓		✓	

\* Up-to-date powder coating technology (USA) and surface preparation line (Germany).

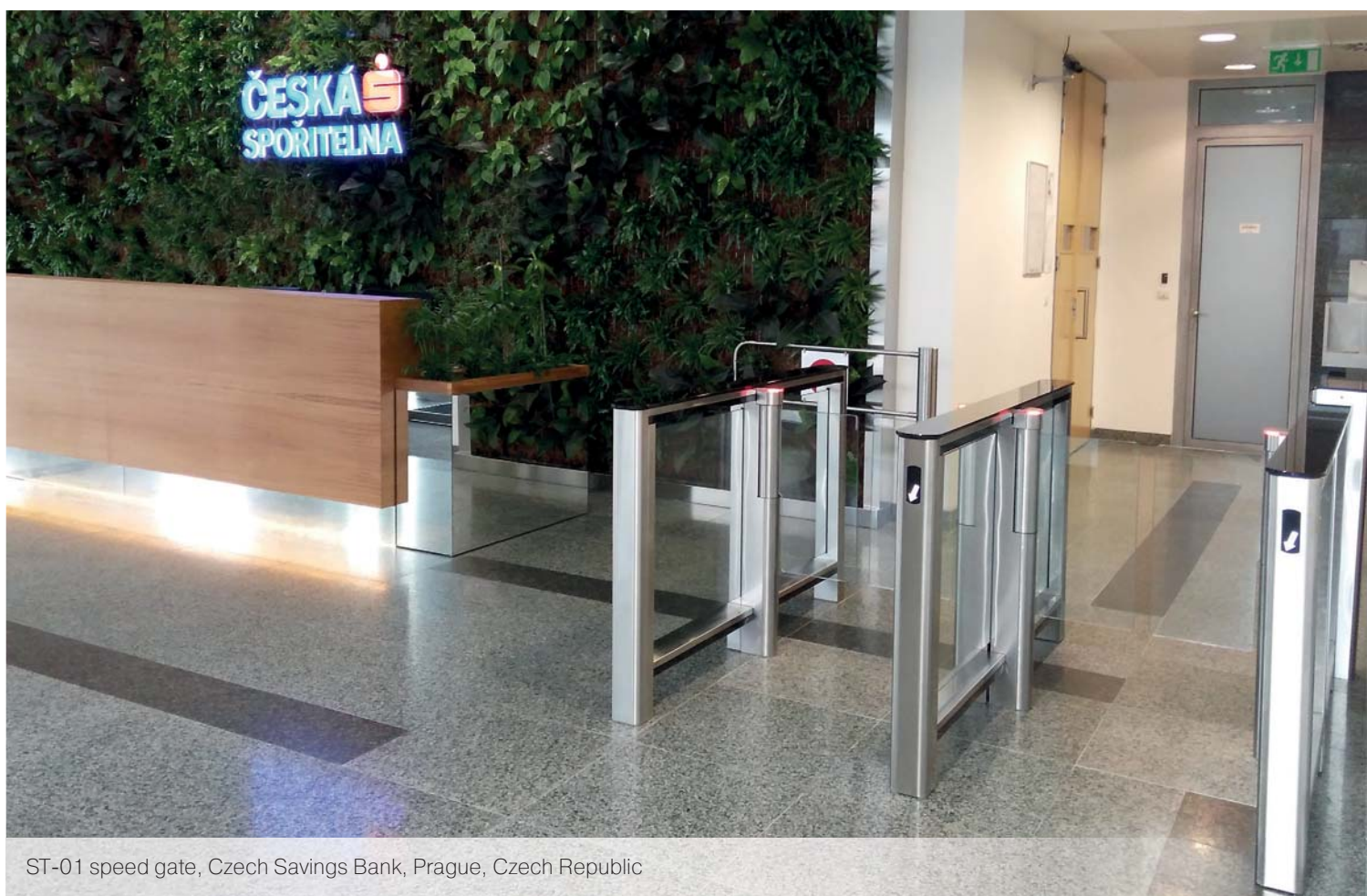
\*\* IP-Stile - complete access control system.



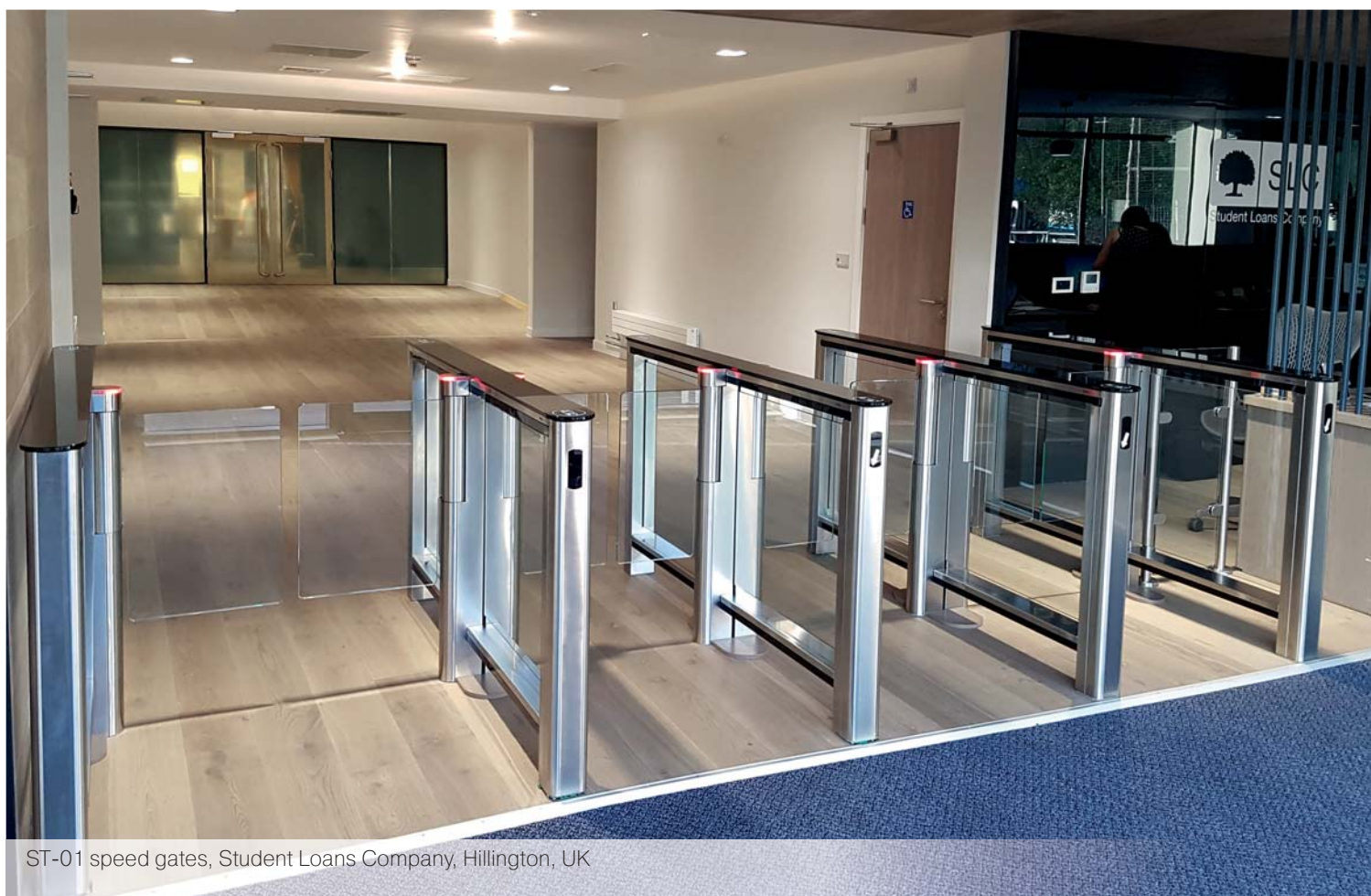


											IP-Stiles**					
Swing gates				Rotor					Speedgates							
WMD-06	WMD-05S	WMD-05SW	WHD-05	RTD-03S	RTD-15.1R	RTD-15.2R	RTD-16.1	RTD-16.2	ST-01	ST-02	KT-08A	KT-02	KT-05	KT-05A	KTC-01	KTC-01A
													✓		✓	
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			✓			✓		✓			✓	✓	✓	✓	✓	✓
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	✓	✓		✓	✓	✓	✓	✓			✓	✓	✓		✓	



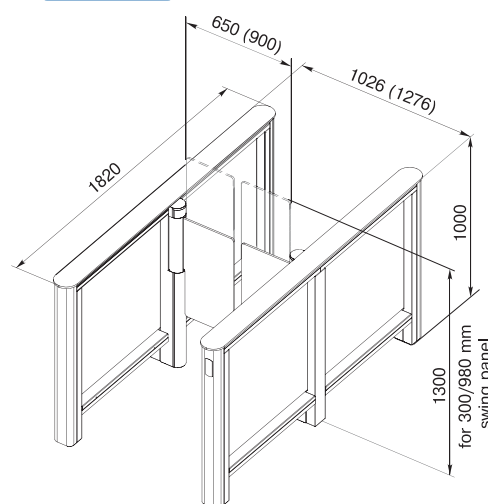
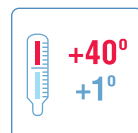


ST-01 speed gate, Czech Savings Bank, Prague, Czech Republic



ST-01 speed gates, Student Loans Company, Hillington, UK

## ST-01 SPEED GATE



Three sizes of swing panels  
300x600 mm  
300x980 mm  
430x600 mm



### Application

The ST-01 speed gate with swing panels is designed in a modern and elegant style and provides an ideal contactless solution for access control at sites with high aesthetic and comfort requirements. The ST-01 is perfectly suitable for a wide range of indoor applications and can be installed in offices, banks, administrative buildings, exhibition and business centres.

The ST-01 speed gate is available with three different sizes of swing panels. The system of infrared sensors ensures the security of passage at high throughput.

In emergency situations after receiving a signal from an ACS or an emergency button the swing panels are opened in a predetermined direction, in case of a power loss the swing panels are unlocked.

### Delivery set

- two gate posts with built-in electronics
- two swing panels
- remote control panel

### Design

The ST-01 is equipped with two LED directional indicators on the front panels and the LED indication of the current mode (open/closed) on the top cover.

The gate housing has specially designed places for concealed mounting of proximity card readers (produced by PERCo or other manufactures).

### Materials and Finishes

Gate posts – stainless steel

Filler panel (for gate posts) – 8 mm tempered glass

Top covers – 10 mm tempered glass

Swing panels – 10 mm tempered glass

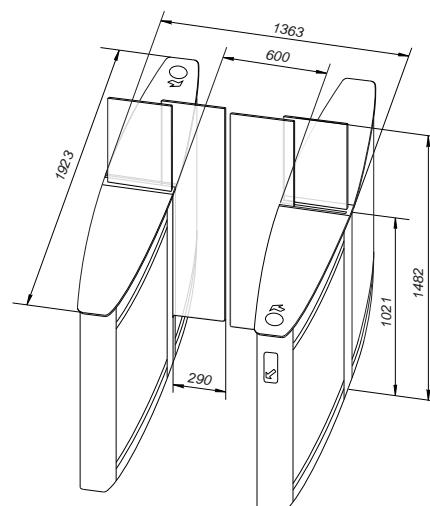




## ST-02 SPEED GATE



 <b>+40° +1°</b>	 <b>2 way control</b>	<b>24 V DC</b> power supply
<b>160 W</b> power consumption	 motor drive	 <b>60</b> persons/min



### Application

The ST-02 speed gate with sliding panels is designed in a modern and elegant style and provides an ideal contactless solution for access control at sites with high aesthetic and comfort requirements. The ST-02 is perfectly suitable for a wide range of indoor applications and can be installed in offices, banks, administrative buildings, exhibition and business centres.

The ST-02 speed gate is available in two versions: with a standard 600 mm passageway or with an extended 900 mm passageway for a comfortable access of people in wheelchairs, mothers pushing prams or shoppers carrying bulky goods. The system of infrared sensors ensures the security of passage at high throughput.

Fail -safe operation ensures free passage in an emergency case.

### Delivery set

- two gate posts with built-in electronics
- two sliding panels
- remote control panel

### Design

The ST-02 is equipped with two LED directional indicators on the front panels and the LED indication of the current mode (open/closed) on the top cover.

The gate housing has specially designed places for concealed mounting of proximity card readers (produced by PERCo or other manufactures).

### Materials and Finishes

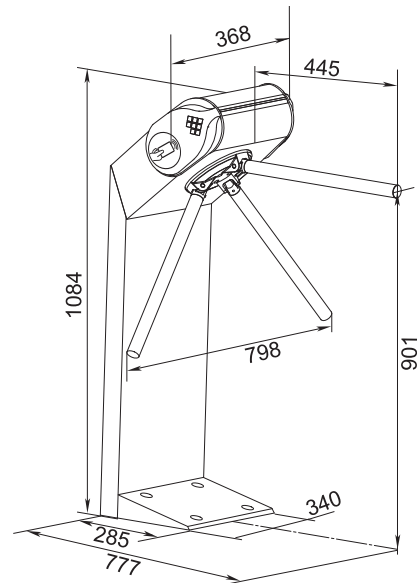
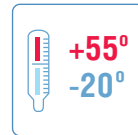
Gate posts – stainless steel  
Top covers – 8 mm tempered glass  
Sliding panels – 8 mm tempered glass



TTR-08A tripod turnstiles, fitness-center «Gravitation», Saint Petersburg



## TTR-08A COMPACT TRIPOD TURNSTILE WITH AUTOMATIC ANTI-PANIC



### Application

The TTR-08A weatherproof compact tripod turnstile is designed for outdoor use (without shelter). It is fitted with automatic anti-panic folding arms and LED indication. In case of power loss or by a signal from an ACS or emergency button the barrier arm automatically falls down leaving the passage free in emergency situations.

With its modern and elegant design the TTR-08A offers a secure and modern-looking solution for various outdoor and indoor applications.

### Delivery set

- turnstile with built-in electronics
- automatic anti-panic folding arms
- remote control panel

### Design

The turnstile housing has specially designed places for concealed mounting of proximity card readers.

The reader operating zones are indicated on the lateral covers of the turnstile with special pictograms.

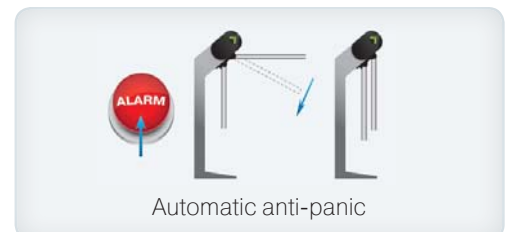
### Materials and Finishes

Turnstile housing – stainless steel

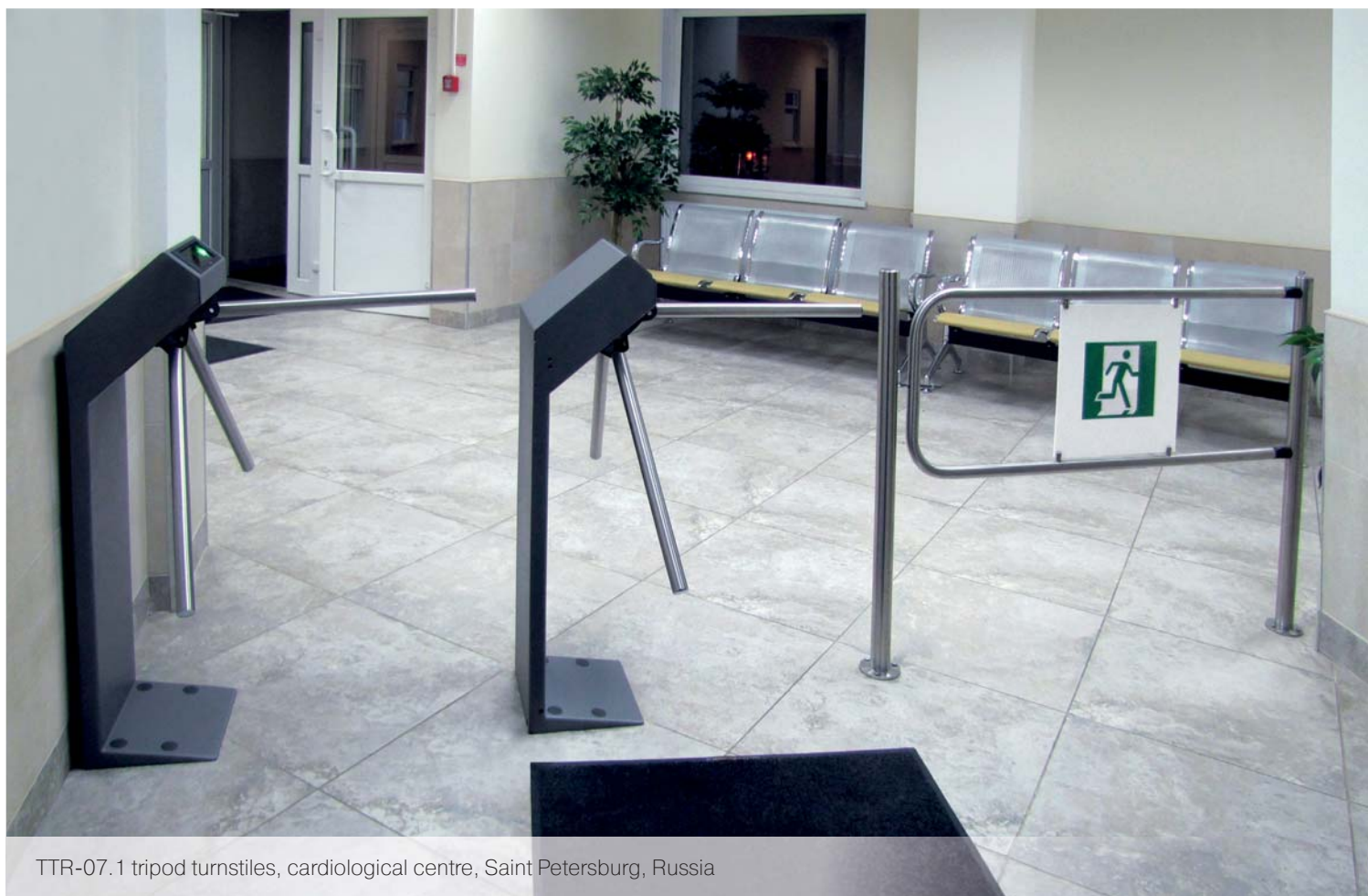
Barrier arms – stainless steel



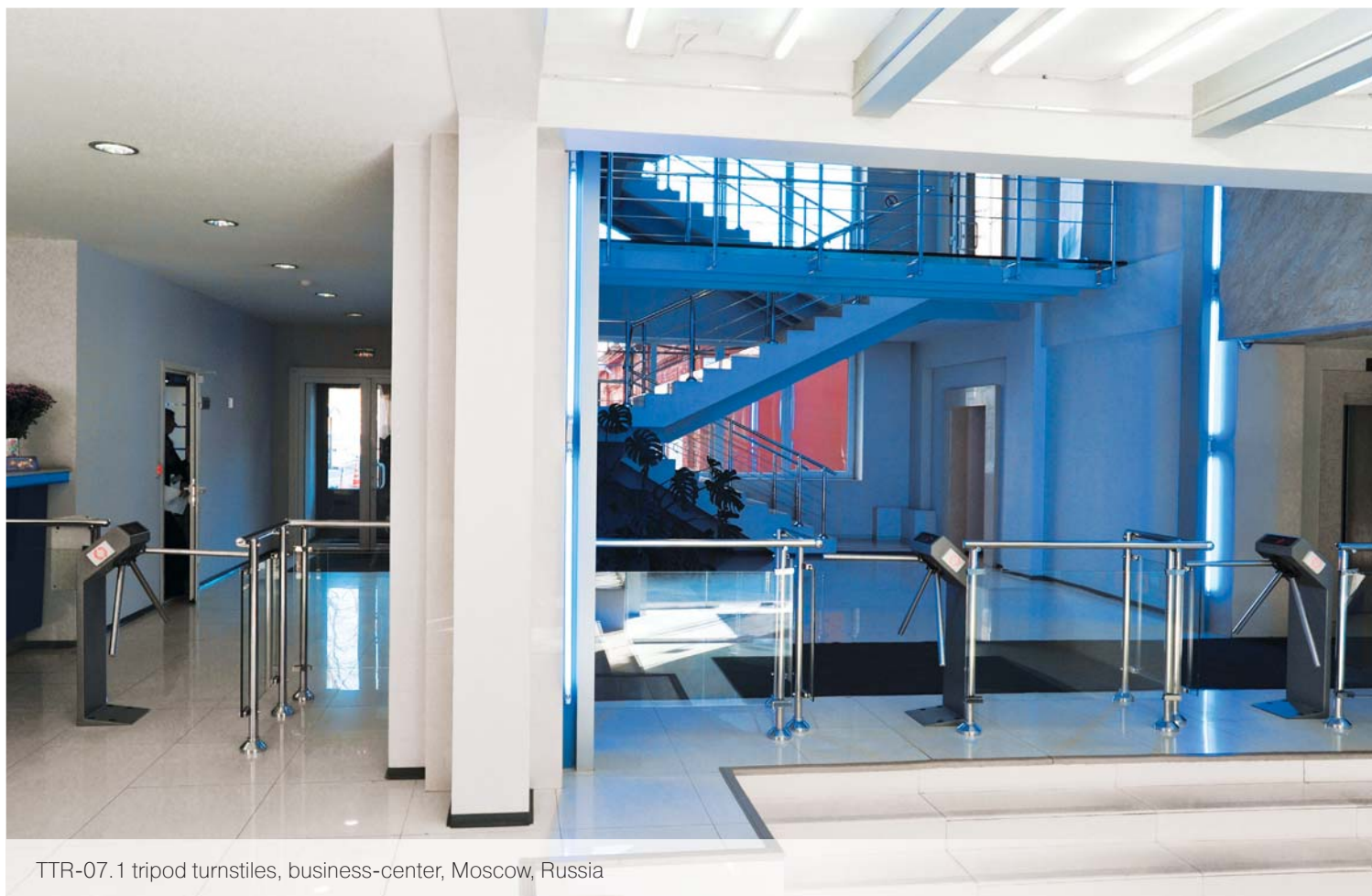
Stainless steel





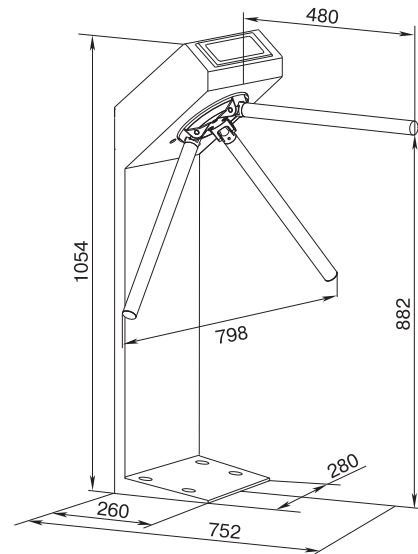
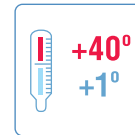


TTR-07.1 tripod turnstiles, cardiological centre, Saint Petersburg, Russia



TTR-07.1 tripod turnstiles, business-center, Moscow, Russia

## TTR-07 COMPACT TRIPOD TURNSTILE WITH AUTOMATIC ANTI-PANIC



Automatic anti-panic folding arms

### Application

The TTR-07 tripod turnstile is a reliable compact solution featuring automatic anti-panic folding arms.

At a power loss, by a signal from an ACS or an emergency button the barrier arm blocking the passage automatically falls down leaving the passage free. When the power is restored just lift the folded arm manually to bring it back into operating position (blocking the passage).

### Delivery set

- turnstile with built-in electronics
- remote control panel
- automatic anti-panic barrier arms

### Design

The TTR-07 tripod turnstile is a reliable compact solution featuring automatic anti-panic folding arms.

### Materials and Finishes

Turnstile housing – steel.

Sandpaper powder coating with pearl mica effect:



dark grey

Barrier arms – stainless steel.



Automatic anti-panic



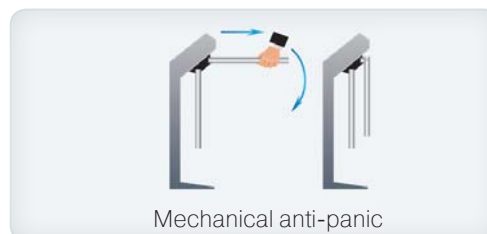
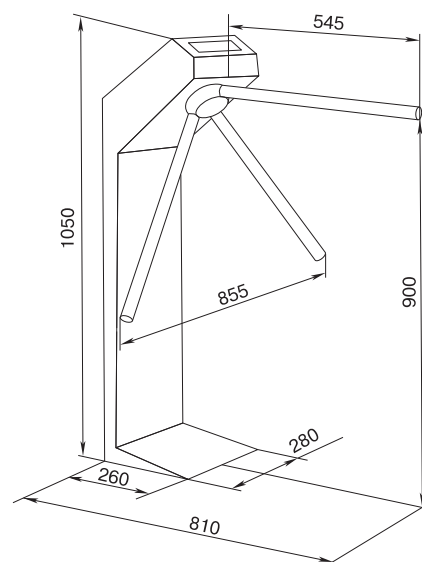
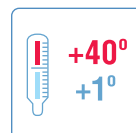


TTR-04.1 tripod turnstiles and BH-02 railings, Hyza Topolcany, Slovakia



TTR-04.1 tripod turnstiles, fitness-center Gym, Dubai, UAE

## TTR-04.1 COMPACT TRIPOD TURNSTILE



### Application

The TTR-04.1 tripod turnstile is a universal access control solution with high throughput capacity and compact design enabling effective management of even intense pedestrian flows.

Available colour options make the TTR-04.1 suitable for various indoor applications: offices, banks, exhibition centres, museums, administrative buildings, retail outlets, railway terminals, airports, etc.

### Delivery set

- turnstile with built-in electronics
- remote control panel
- standard/anti-panic barrier arms (the type is chosen by a Client at the time of order)

### Materials and Finishes

Turnstile housing – steel; corrosion-resistant zinc coat plus fine structure powder coating finish.

Sandpaper powder coating with pearl mica effect:



light beige



dark grey

Powder coating with lacquered finish:



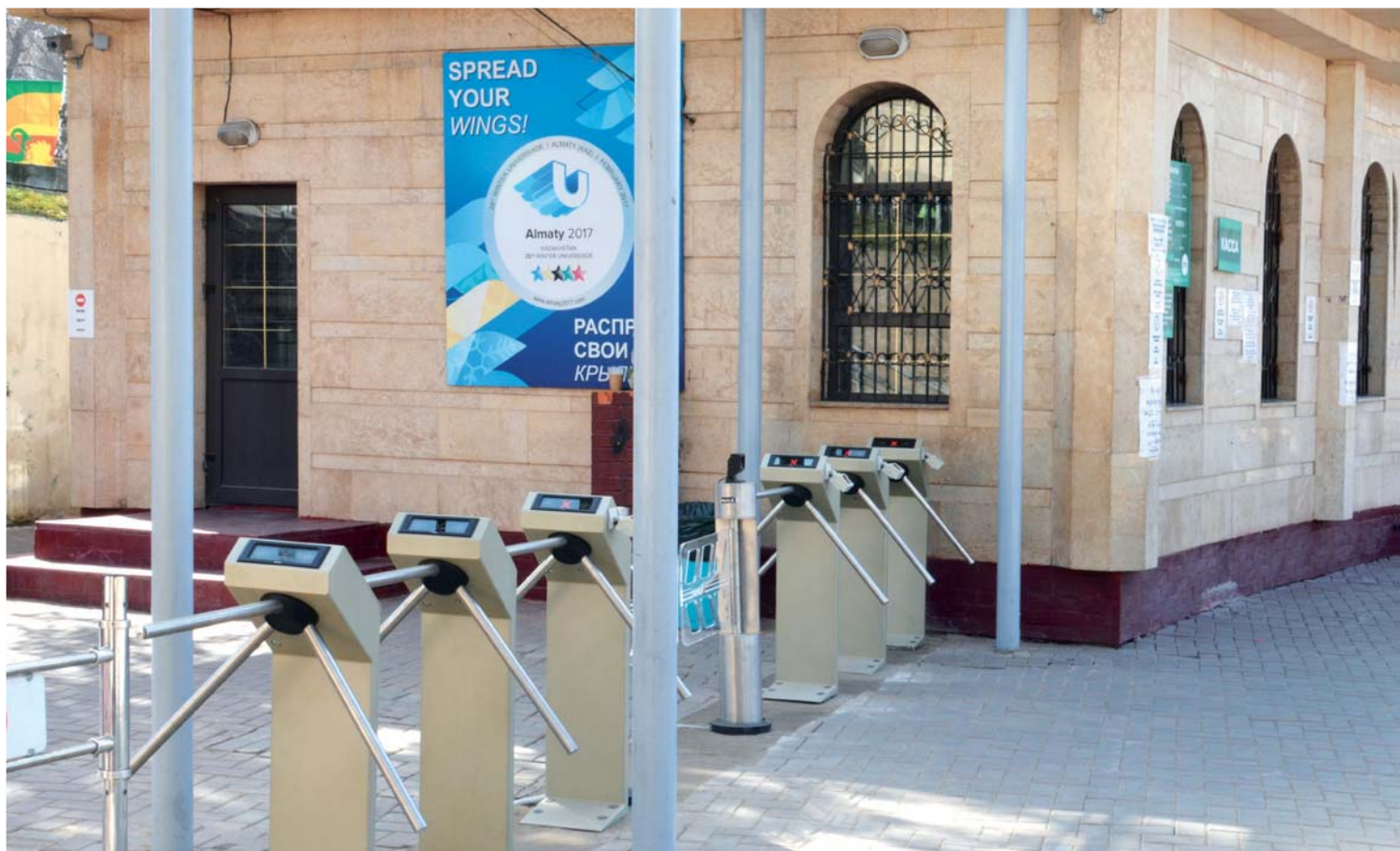
glitter black, starlit night

Barrier arms – stainless steel.



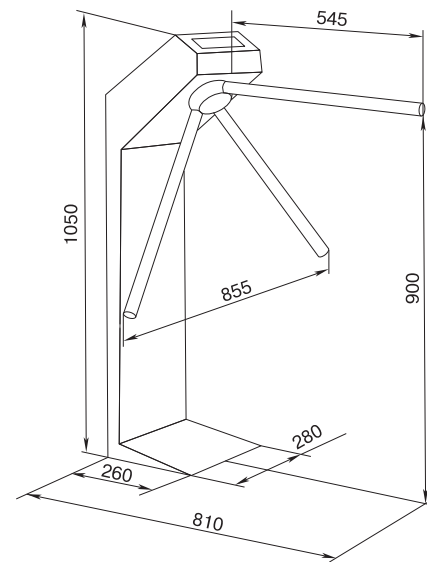
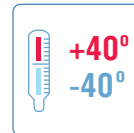


TTR-04CW tripod turnstiles and BH-02 railings, Hermitage, Saint Petersburg



TTR-04CW tripod turnstiles, Almaty Zoo, Kazakhstan

## TTR-04CW OUTDOOR COMPACT TRIPOD TURNSTILE



### Application

The TTR-04CW tripod turnstile is designed for outdoor applications (under shelter) or in facilities without climate control. For better corrosion resistance the turnstile housing is coated with a layer of zinc 9 micron thick, applied by electro-chemical galvanizing, and after that with a powder coating finish. Together with a built-in thermocontrol system which keeps temperature inside the turnstile housing positive, improved coating makes the TTR-04CW a perfect solution for outdoor use.

### Delivery set

- turnstile with built-in thermocontrol system
- remote control panel
- standard barrier arms

### Materials and Finishes

Turnstile housing – steel; corrosion-resistant zinc coat plus fine structure powder coating finish.

Sandpaper powder coating with pearl mica effect:



light beige

Barrier arms – stainless steel.



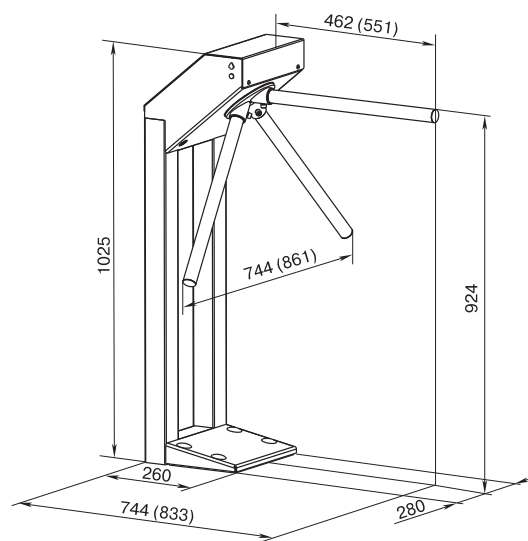
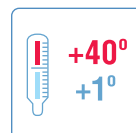


T-5 tripod turnstiles at the main entrance of the philatelic trade show at Parc Floral, Paris, France



T-5 tripod turnstiles, fitness-center, Paris, France

## T-5 COMPACT TRIPOD TURNSTILE



### Application

The T-5 turnstile provides a low-cost entrance control solution for businesses and organisations. With the functionality, mechanics and electronics similar to those of the TTR-04.1 series, this turnstile features a simpler construction design and light indication.

### Delivery set

- turnstile with built-in electronics
- remote control panel
- standard/anti-panic barrier arms (the type is chosen by a Client at the time of order)

### Materials and Finishes

Turnstile housing – steel.

Sandpaper powder coating:



light grey

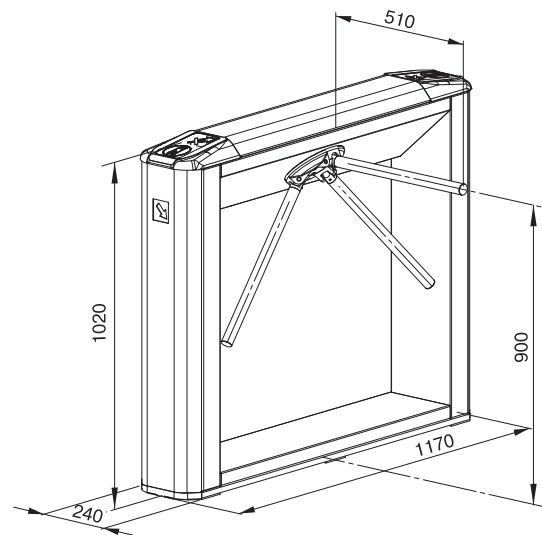
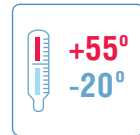
Barrier arms – stainless steel/painted steel, black.





TTD-08A tripod turnstiles, Univeristy of Southern Philippines Foundation, Cebu, Philippines

## TTD-08A BOX TRIPOD TURNSTILE WITH AUTOMATIC ANTI-PANIC



### Application

The TTD-08A weatherproof box tripod turnstile is designed for outdoor use (without shelter). It is fitted with automatic anti-panic folding arms and LED indication. In the event of power loss or by a signal from an ACS or emergency button the barrier arm automatically falls down leaving the passage free in emergency situations.

The TTD-08A is designed in a modern style and provides a secure, elegant and modern-looking solution for outdoor and indoor applications.

### Delivery set

- turnstile with built-in electronics
- automatic anti-panic folding arms
- remote control panel

### Design

The turnstile features two LED directional indicators on the front panels and the LED indication of the current mode (open/closed) on the top cover.

The turnstile housing has specially designed places for concealed mounting of proximity card readers.

The card reader operating zones on each side of the top cover are indicated with special pictograms.

### Materials and Finishes

Turnstile housing – stainless steel

Barrier arms – stainless steel



Stainless steel





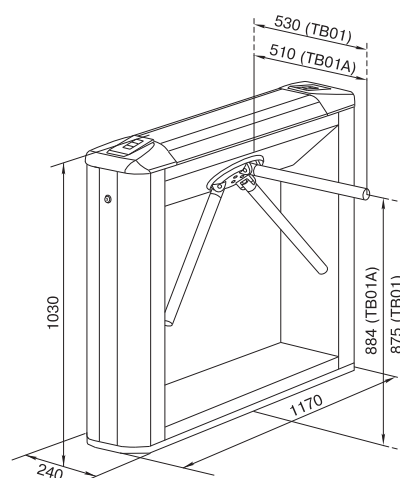
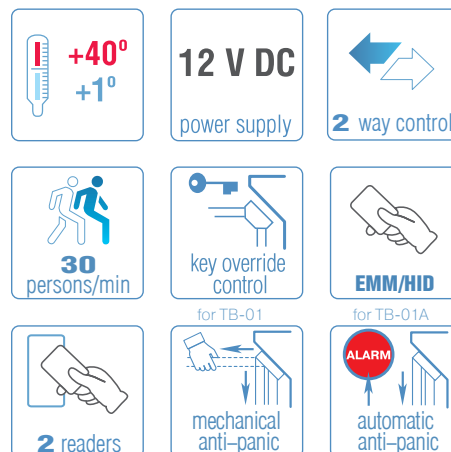


TB-01 box tripod turnstiles, manufacturing facility «Severnaya Zarya», Saint Petersburg



TB-01 box tripod turnstiles, business-center «Pokrovskiy», Minsk, Belarus

## TB-01/TB-01A BOX TRIPOD TURNSTILE



Card reader, built-in

### Application

The TB-01 box tripod turnstile offers an elegant and compact solution for entrance ways with high flow at sites where interior aesthetics and security are high priorities. Fitted with two readers with Wiegand interface the turnstile can be easily integrated in any access control system.

### Delivery set

- turnstile with built-in electronics and 2 readers (EMM/HID)
- remote control panel
- standard/anti-panic barrier arms (the type is chosen by a Client at the time of order)

### Design

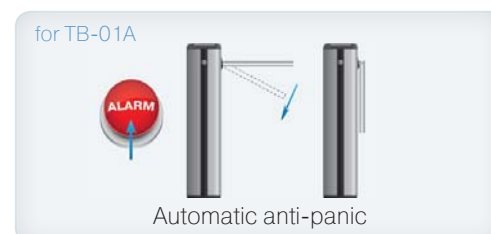
Thanks to its design, when installed in a line, the TB-01 housings ensure secure controlled passageway, providing space-effective solution for your entrance point. Inbuilt readers will save your time, expenses and installation efforts ensuring nice concealed mounting of card readers.

### Materials and Finishes

Turnstile housing/barrier arms – stainless steel.



Stainless steel



Automatic anti-panic

for TB-01



Mechanical anti-panic





TBC-01 box tripod turnstiles and BH-02 railings, business-center «Preobrazhenskiy Dvor»



TB-01 box tripod turnstiles, business-center «Lotte», Moscow

## TBC-01/ TBC-01A BOX TRIPOD TURNSTILE



### Application

The TBC-01 turnstile is a multi-functional entrance solution for access control of personnel using permanent access cards and visitors required to return guest card upon leaving the facility. A guest card meant for return will be captured by the built-in card capture reader.

### Delivery set

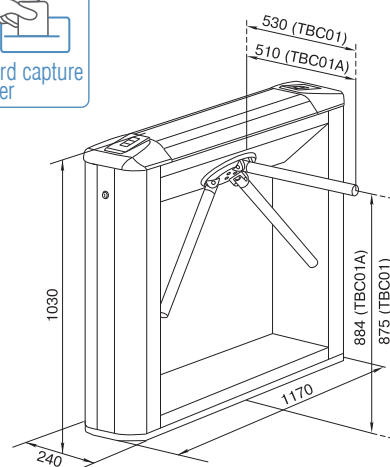
- turnstile with built-in electronics, 2 readers and a card capture reader (EMM/HID)
- remote control panel
- standard/anti-panic barrier arms (the type is chosen by a Client at the time of order)

### Design

Nicely built-in card readers and a card capture reader will save your time, expenses and installation efforts, allowing you to arrange passage for personnel and visitors through one control device.

The card capture reader can be configured to operate either at exit or at entrance way depending on your entrance layout.

Card container capacity: 350 cards.



Card reader, built-in



Card capture reader, built-in

### Materials and Finishes

Turnstile housing/barrier arms – stainless steel.



Stainless steel



Automatic anti-panic

for TBC-01



Mechanical anti-panic



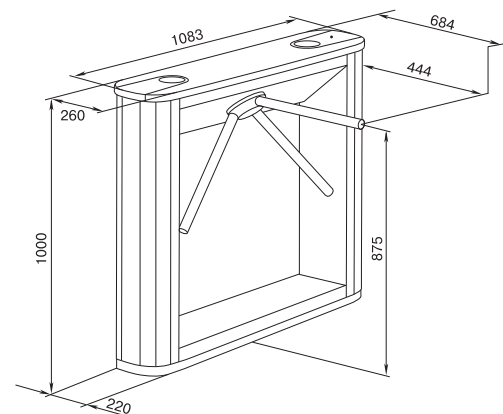
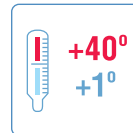


TTD-03.1 box tripod turnstiles, business-center «Streamline Plaza», Москва

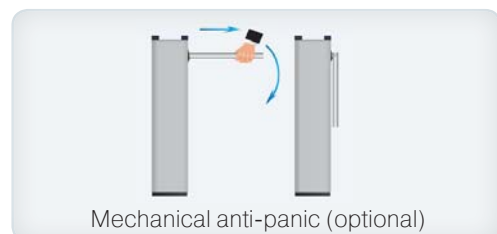


TTD-03.1 box tripod turnstiles and BH-02 railings, business-center «Ramek», Moscow

## TTD-03.1 BOX TRIPOD TURNSTILE



LED directional indicators



Mechanical anti-panic (optional)

### Application

The TTD-03.1 turnstiles offer optimal entrance control solution for places with high pedestrian flows. Especially suitable for entrances where fast pedestrian throughput and security must not come at the expense of aesthetics. Installed in one line, these turnstiles will create the passageway area without installation of extra guide barriers.

### Delivery set

- turnstile with built-in electronics
- remote control panel
- standard/anti-panic barrier arms (the type is chosen by a Client at the time of order)

### Design

The top cover made of artificial stone is radio-transparent for concealed mounting of proximity card readers and features two built-in LED directional indicators. Reader operating zones on the top cover stand out with a different colour.

### Materials and Finishes

Turnstile housing – stainless/powder coated steel.



Stainless steel

Sandpaper powder coating with pearl mica effect:



dark grey

Top cover – artificial stone:



dark blue



black

Barrier arms – stainless steel.



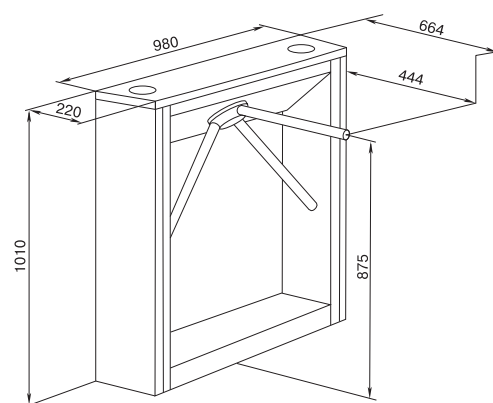
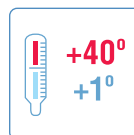


TTD-03.2 box tripod turnstile, fitness-center «Megafit», Forbach, France



TTD-03.2 box tripod turnstiles, «Yandex» office, Moscow

## TTD-03.2 BOX TRIPOD TURNSTILE



LED directional indicators



Mechanical anti-panic (optional)

### Application

Secure and capable of managing fast throughput, the TTD-03.2 provides industrial sites with solid hardware for entrance control. Made entirely of stainless steel it will as well perfectly fit interior of banks, office buildings and financial institutions providing modern-looking solution together with secure control. Installed in one line, these turnstiles will make the passageway area without installation of extra guide barriers.

### Delivery set

- turnstile with built-in electronics
- remote control panel
- standard/anti-panic barrier arms (the type is chosen by a Client at the time of order)

### Materials and Finishes

Turnstile housing – stainless steel/powder coated steel.



Stainless steel

Sandpaper powder coating with pearl mica effect:

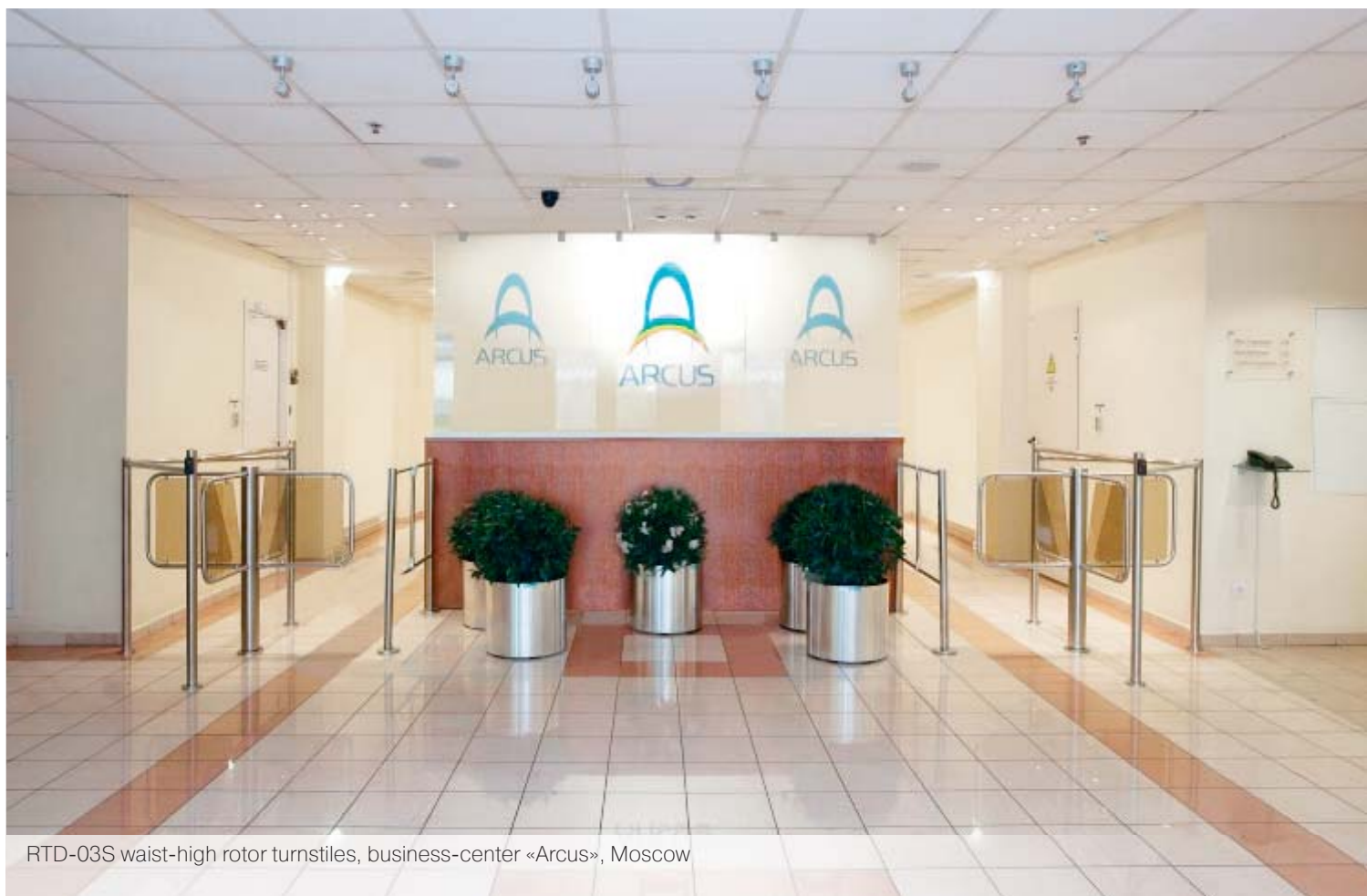


dark grey

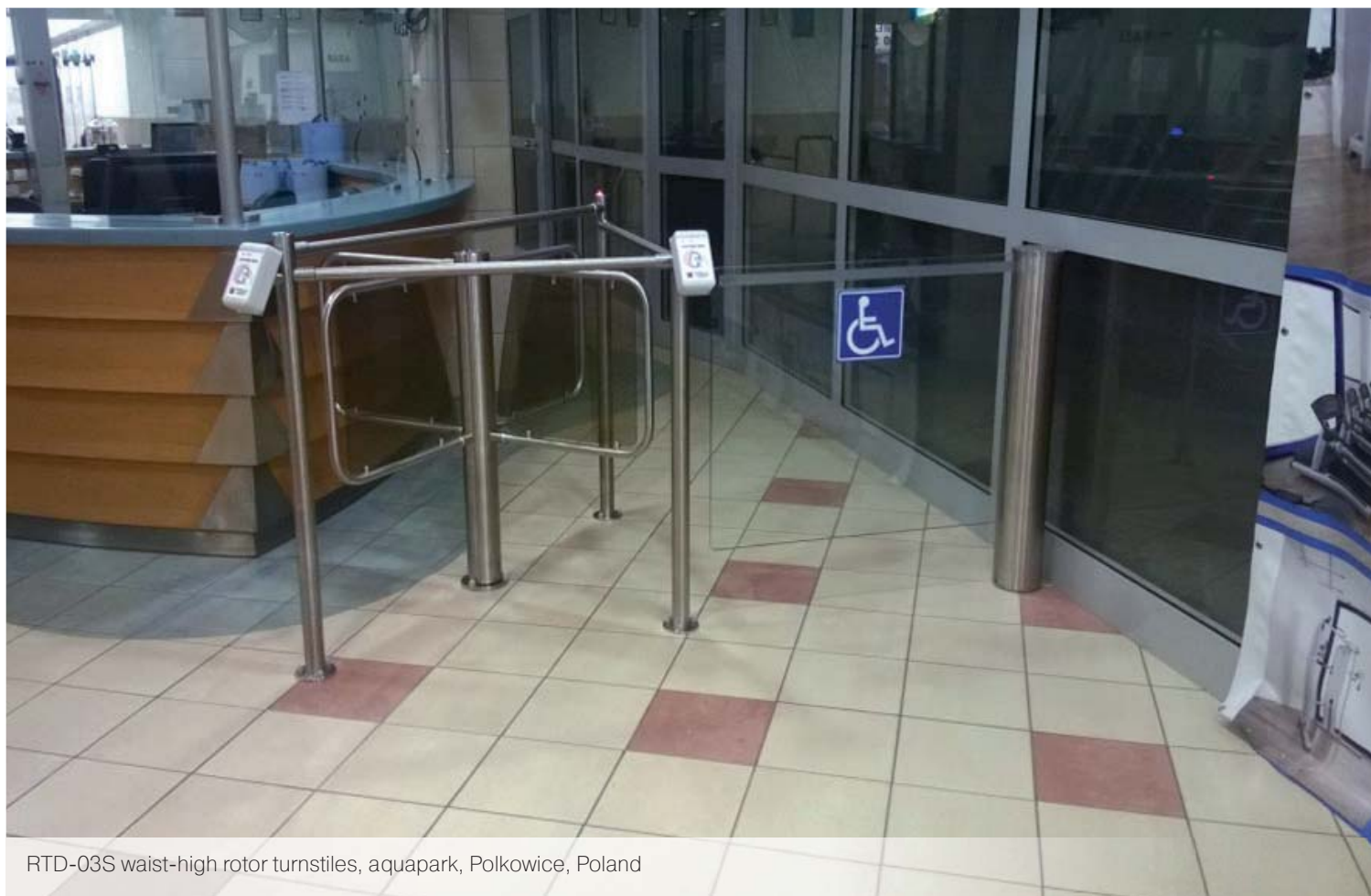
Top cover – stainless steel.

Barrier arms – stainless steel.





RTD-03S waist-high rotor turnstiles, business-center «Arcus», Moscow



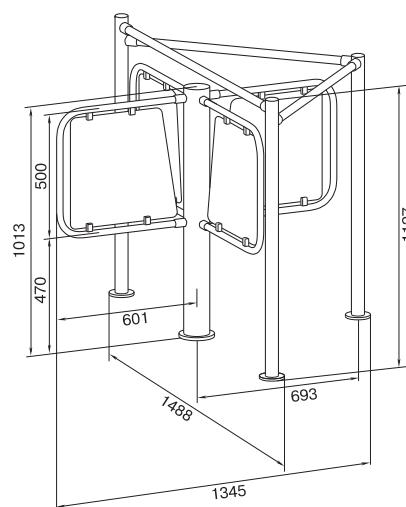
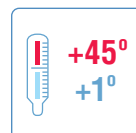
RTD-03S waist-high rotor turnstiles, aquapark, Polkowice, Poland



## RTD-03S WAIST-HIGH ROTOR TURNSTILE



Waist-high rotor turnstile with RB-03S stainless steel guide barrier set



Red/Green status lights

### Application

The RTD-03S rotor turnstiles are designed for control of access at entrance points where security and comfort of passage are equally important. The turnstile features an electric drive which ensures smooth automatic reset after each passage. Made of polished stainless steel, supplied with matching stainless steel barrier guides with built-in status lights the turnstile will fit any modern interior design.

### Delivery set

- turnstile housing
- guide barrier set
- control unit with power supply and battery
- remote control panel

### Materials and Finishes

Rotor, posts, handrails, barrier wing frames – stainless steel.



Stainless steel

Filler panels – polycarbonate sheets.



RTD-03S waist-high rotor turnstiles, BH-02 railing sections and WMD-05S swing gate at the entrance of manufacturing facility «TATRAVAGONKA a.s.», Slovakia



RTD-03S waist-high rotor turnstiles, business-center «Tupolev Plaza», Moscow



## RTD-03S WAIST-HIGH ROTOR TURNSTILE



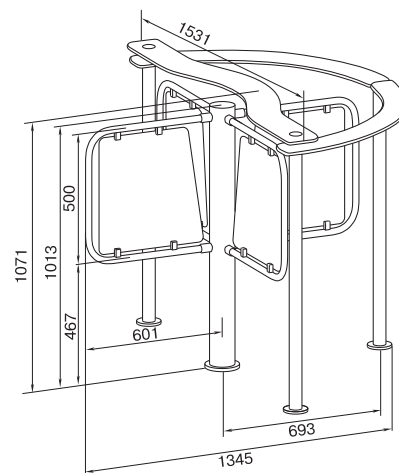
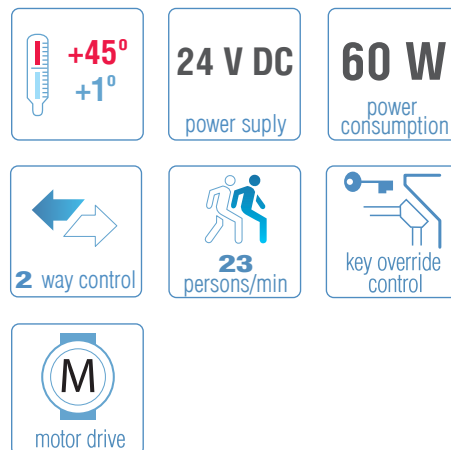
Waist-high rotor turnstile with RB-03TP stainless steel guide barrier set and wooden handrails

### Application

The RTD-03S rotor turnstiles are designed for control of access at entrance points where security and comfort of passage are equally important. The turnstile features an electric drive which ensures smooth automatic reset after each passage. Made of polished stainless steel, supplied with matching stainless steel barrier guides and wooden handrails with built-in LED directional indicators the turnstile will fit any modern interior design.

### Delivery set

- turnstile housing
- guide barrier set
- control unit with power supply and battery
- remote control panel



LED directional indicators

### Materials and Finishes

Rotor, posts, barrier wing frames – stainless steel.



Stainless steel

Filler panels - polycarbonate sheets.  
Handrails - solid ashwood/beechwood, stainless steel.



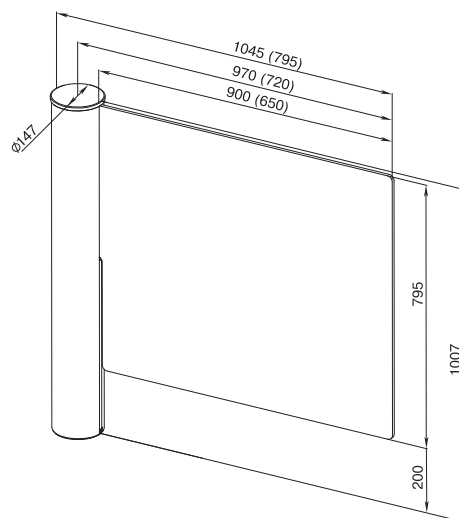
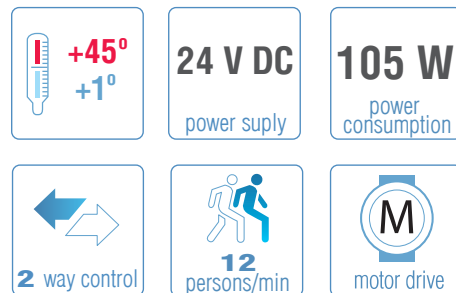


WMD-06 swing gates and TTD-03.2 box tripod turnstile, fitness-center «Megafit», Forbach, France



WMD-06 swing gate and ST-01 speed gates, holding office «PIK», Moscow

## WMD-06 MOTORIZED SWING GATE



### Application

The WMD-06 motorized swing gate with glass panel for indoor use is an up-market model that offers an elegant solution for entrance points of banks, administrative buildings, business centres and other sites with the highest requirements for design and comfort.

The WMD-06 features a tempered glass swing panel available in two versions: a standard panel (650 mm) or an extended panel (900 mm) for convenient wheel-chair access. In emergency situations the gate with the extended swing panel can be used as an additional emergency exit.

### Delivery set

- gate post with built-in electronics
- tempered glass swing panel 650/900 mm
- remote control panel

### Design

Fail-safe operation provides gate unlocking in case of fire alarm or if the electricity is down.

The WMD-06 gates can be installed in pairs facing each other. In this case the 2 gates will be able to provide well-synchronized operation being controlled by one control signal.

The transparent glass panel is fitted with the matt tape along the top edge that helps to prevent people from bumping into the glass.

### Materials and Finishes

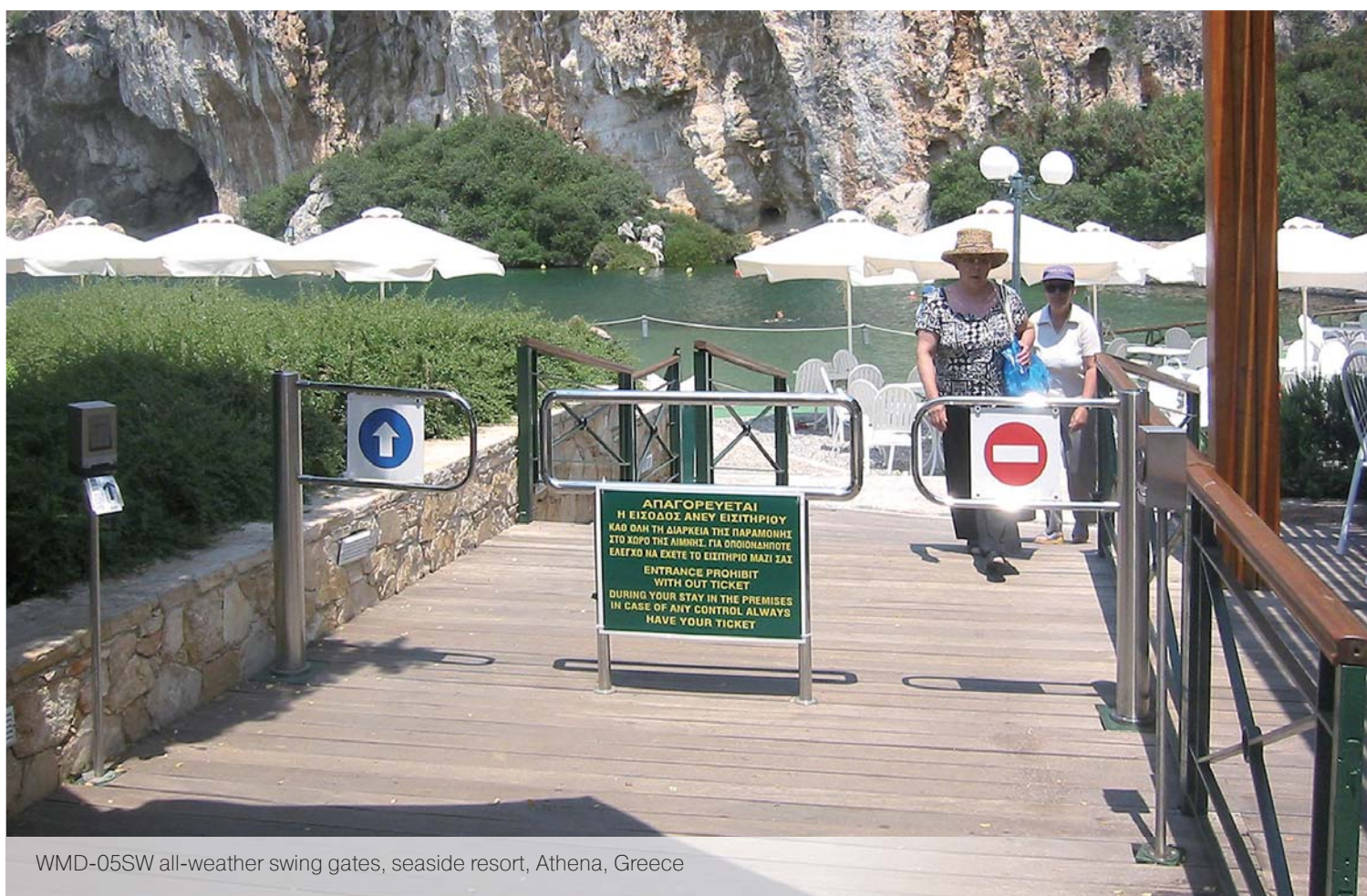
Gate post – stainless steel

Swing panel – 10 mm tempered glass



Stainless steel





WMD-05SW all-weather swing gates, seaside resort, Athena, Greece

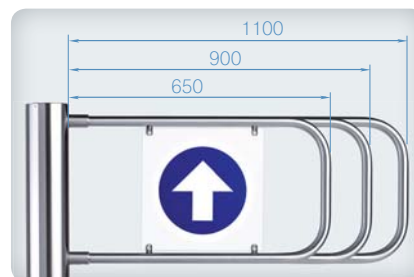
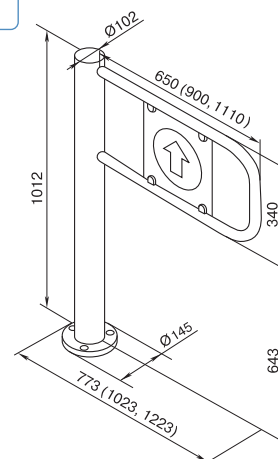
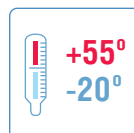


WMD-05SW all-weather swing gates, The Mariinsky Theatre, Saint Petersburg



## WMD-05SW MOTORIZED SWING GATE

NEW



### Application

Motorized swing gates WMD-05SW provide an ideal contactless solution for access control at sites with high aesthetic and comfort requirements, for people in wheelchairs and for transportation of bulky goods.

### Delivery set

- swing gate post
- swing panel (the length is chosen by a Client at time of order)
- control unit with built-in standby power supply
- remote control panel

### Design

In order to provide resistance to climatic factors, WMD-05SW is made of corrosion resistant materials, its top cover is supplied with an O-ring and its post is supplied with a mechanical release lock for outdoor use, which helps to protect the product from ingress of dust and moisture.

The WMD-05SW swing gate features a new drive with a built-in high-accuracy location sensor (encoder).

Emergency unlocking input Fire Alarm enables connection of an external device which can unlock the gate for free passage in both directions.

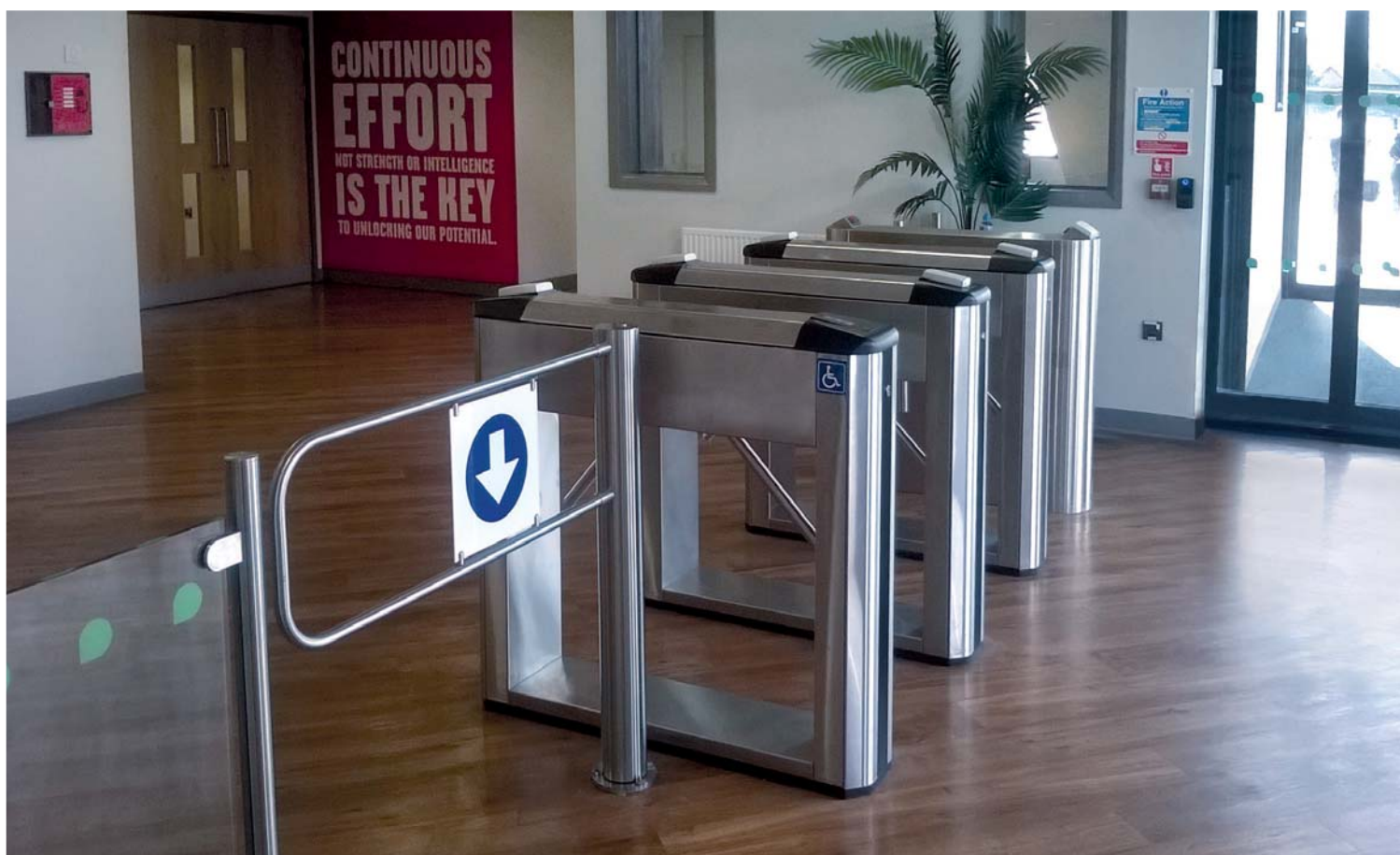
### Materials and Finishes

Swing gate post/swing panel – stainless steel.



Stainless steel

Filler panel (double-sided info sign) – reinforced plastic.

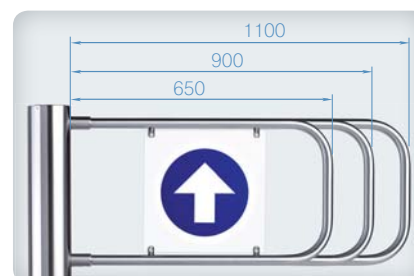
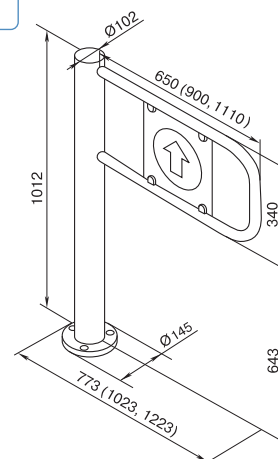
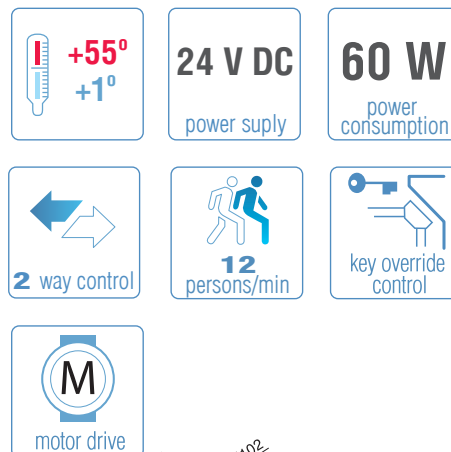
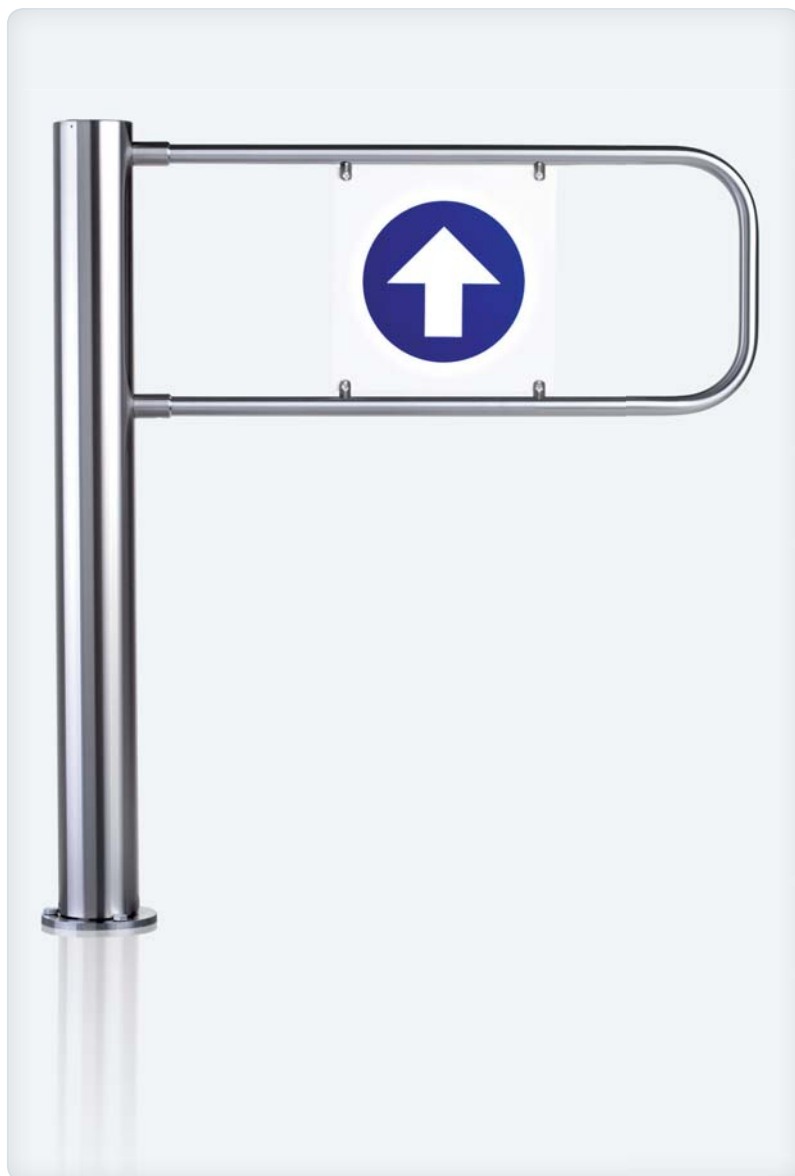


WMD-05S swing gate, Peterborough Regional College, Cambridgeshire, UK



TTD-03.1 box tripod turnstiles with anti-panic arms and WMD-05 swing gates, Italy

## WMD-05S MOTORIZED SWING GATE



### Application

Motorized swing gates of WMD series have proven an ideal access control solution for convenient access of people in wheelchairs, mothers pushing prams or shoppers carrying bulky goods.

### Delivery set

- swing gate post
- control unit with power supply and battery
- remote control panel
- swing panel 650/900/1100 mm (the length is chosen by a Client at the time of order)

### Design

- The WMD-05S swing gate features a drive with a high-accuracy location sensor (encoder) ensuring well-synchronized operation of 2 swing gates controlled by one control signal.

With an additional input for Fire Alarm the swing gate can be unlocked in any direction from an external control device by a fire alarm signal, for instance.

### Materials and Finishes

Swing gate post/swing panel – stainless steel.



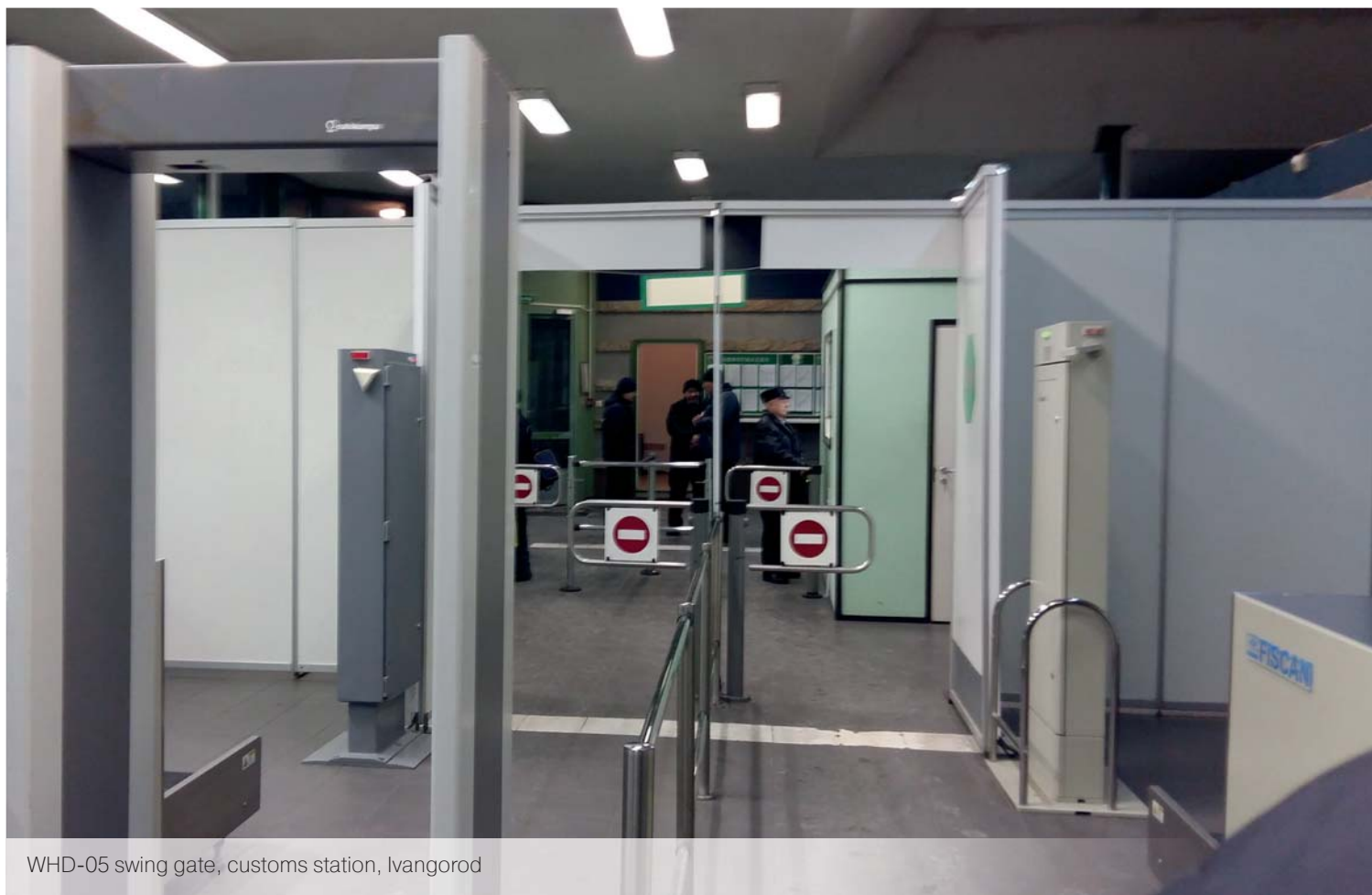
stainless steel

Filler panel (double-sided info sign) – reinforced plastic.



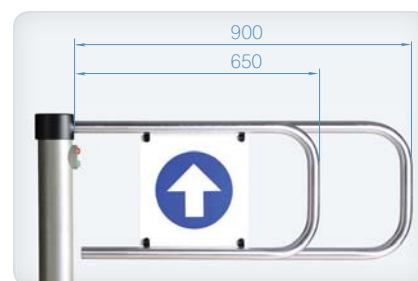
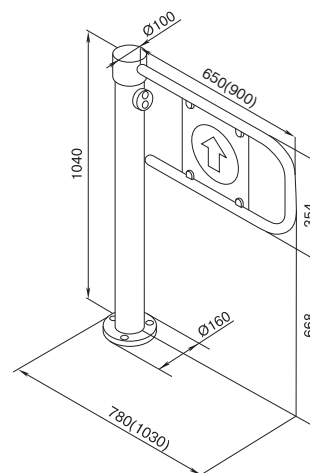
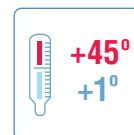


TTR-04.1 tripod turnstile and WHD-05 swing gate, ELBA enterprise, Slovakia



WHD-05 swing gate, customs station, Ivangorod

## WHD-05 SWING GATE



### Application

An economical access control solution which is often used to control one-way pedestrian traffic. The WHD-05 swing gate can be supplied with two types of swing panel: 650 mm or 900 mm. The extended 900 mm swing panel ensures a comfortable access of people in wheelchairs, mothers pushing prams or shoppers carrying bulky goods.

### Delivery set

- gate post
- control unit with power supply and battery
- remote control panel
- swing panel 650/900 mm

### Design

- Fail-safe operation provides gate unlocking in case of fire alarm or if the electricity is down.

When the gate is unlocked by the signal from the remote control panel or access control system, the entrant should push the swing panel in the direction of authorized passage. The gate will smoothly return to home position after the passage is complete. If required, one of the passage directions can be mechanically locked.

### Materials and Finishes

Gate post – powder coated steel  
Swing panel – brushed stainless steel  
Filler panel – double-sided info sign, reinforced plastic  
Sandpaper powder coating with pearl mica effect:



light beige



dark grey



Red/green status lights





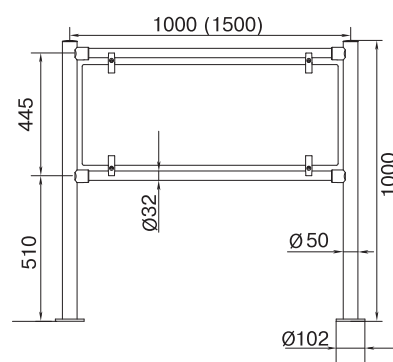
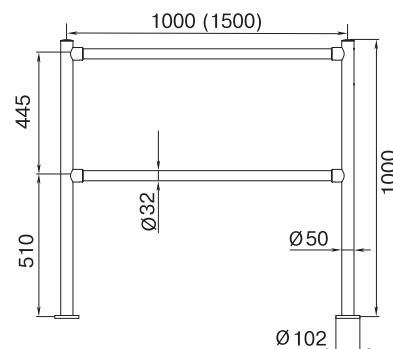
BH-02 railings, business-center «Mezon», Saint Petersburg



BH-02 railings, business-center «Imperial», Saint Petersburg



## BH-02 WAIST-HIGH RAILING SECTIONS



Adjustable coupling fittings

### Application

Styled in one design the BH-02 series enables you to enclose open space that needs to be secured completing your passageway. The BH-02 series offers 4 types of posts, several types of coupling fittings as well as railings up to 1400 mm long allowing you to form railing system of any configuration.

### Design

The BH-02 railings match and easily integrate with various models of PERCo turnstiles and swing gates.

### Materials and Finishes

End posts – stainless steel pipe, D-50 mm.

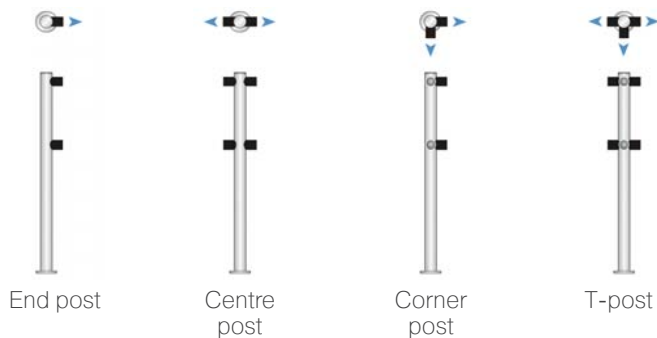
Railing – stainless steel pipe, D-32 mm.



Stainless steel

Coupling fittings – plastic, black.

Filler panels – polycarbonate.



End post

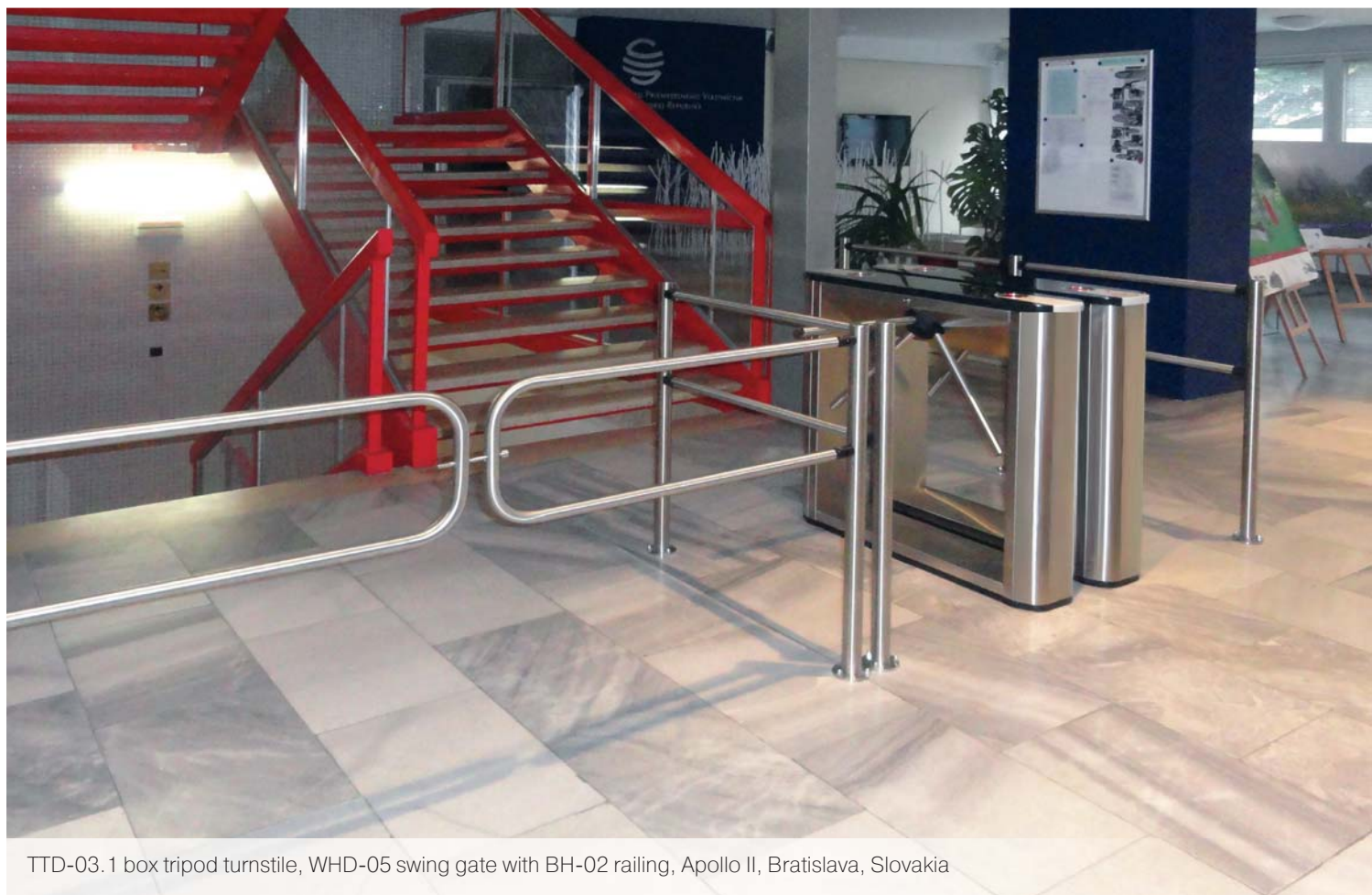
Centre post

Corner post

T-post

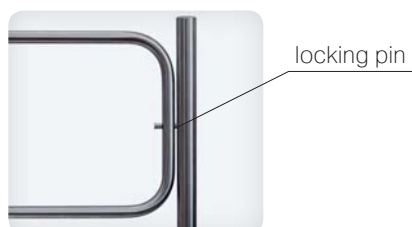
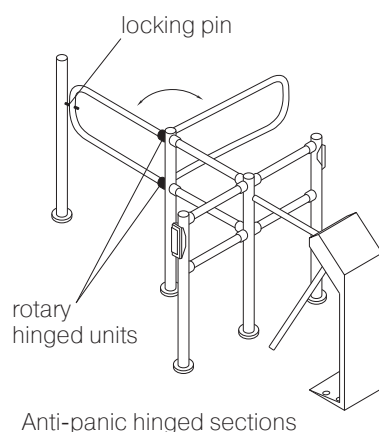
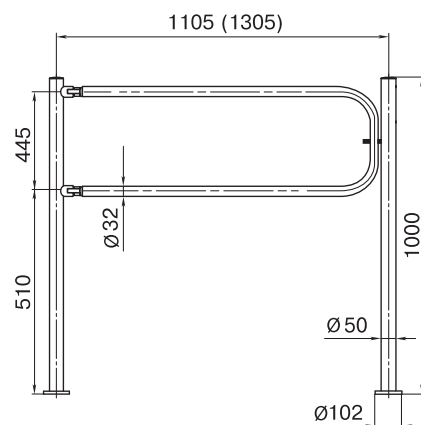


TB-01 box tripod turnstile and BH-02 railing with anti-panic section, business-center «Renesans Pravda», Saint Petersburg



TTD-03.1 box tripod turnstile, WHD-05 swing gate with BH-02 railing, Apollo II, Bratislava, Slovakia

## BH-02 WAIST-HIGH RAILING SECTIONS



### Application

The BH-02 hinged section of rotary type is designed to provide an unobstructed and fast escape route in emergency cases. Thanks to its design and a passage width of up to 1200 mm the hinged section is suitable for wheelchair access and deliveries of large or bulky items.

### Design

At normal operation the BH-02 hinged section is used as a railing section to complete a passage area. When needed, the section can be opened in any direction without use of special tools or keys, by pulling the locking pin.

### Materials and Finishes

End posts – stainless steel pipe, D-50 mm.

Swing panel – stainless steel pipe, D-32 mm.

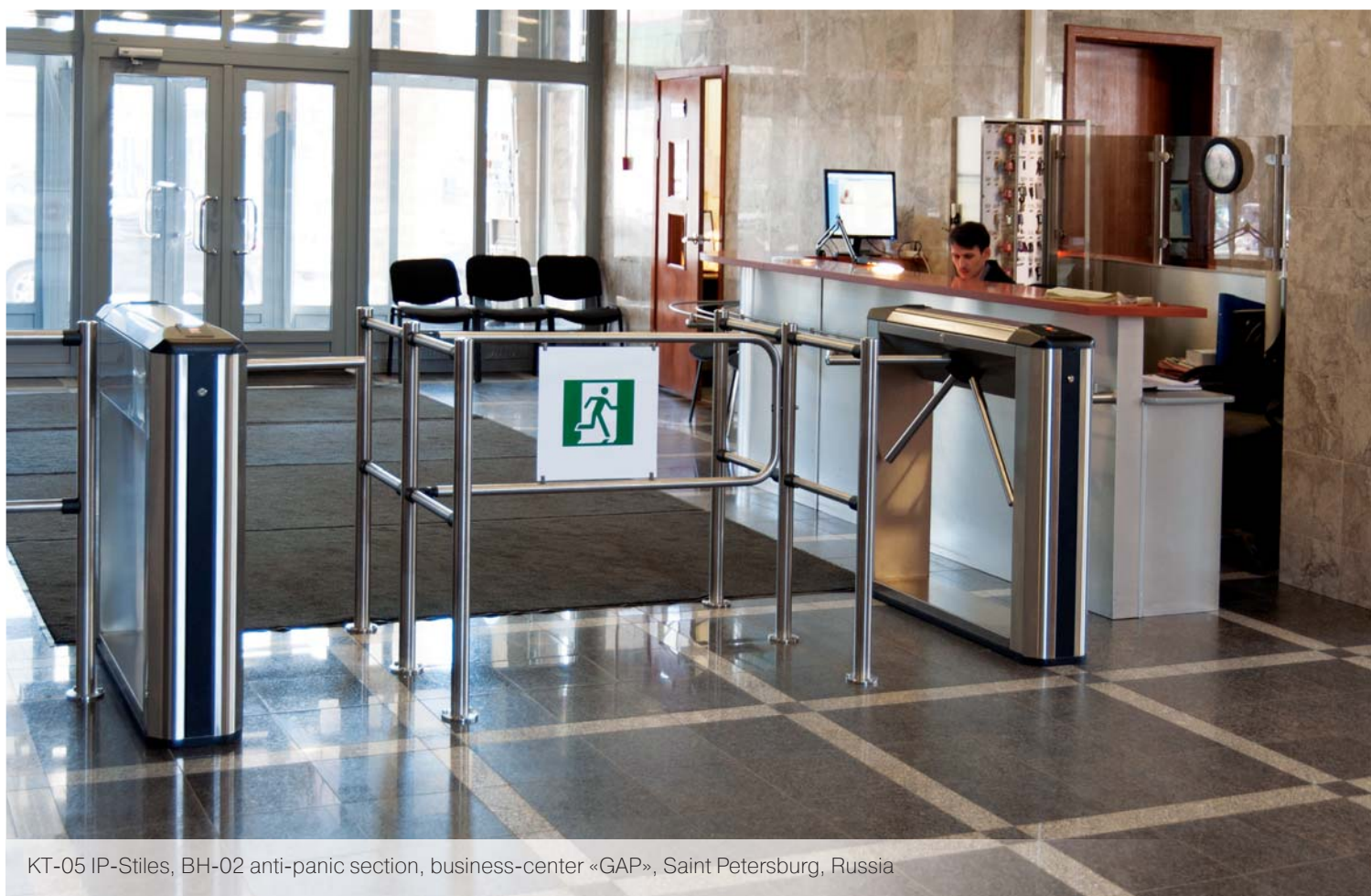


Stainless steel





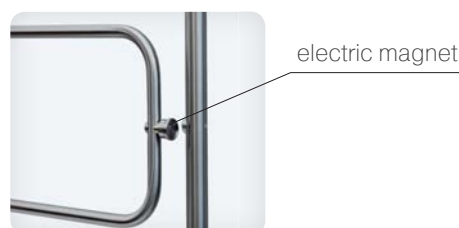
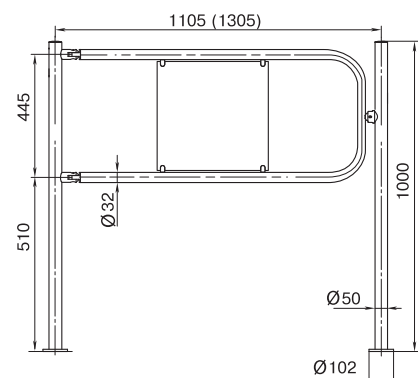
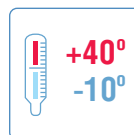
TTR-04.1 tripod turnstiles and BH-02 railings, business-center «Feniks», Saint Petersburg, Russia



KT-05 IP-Stiles, BH-02 anti-panic section, business-center «GAP», Saint Petersburg, Russia

## BH-02 WAIST-HIGH RAILING SECTIONS

WITH AUTOMATIC ANTI-PANIC



electric magnet

Fail-safe operation

### Application

Designed to ensure free passage in an emergency case the hinged section BH-02 automatically opens:

- at a power loss
- by signal from an ACS or emergency button
- manually, if force applied to its swing panel exceeds 40 kg.

Apart from being used as an emergency exit, the BH-02 hinged section with its width of 1200 mm is a perfect solution to arrange passage for disabled people.

### Design

BH-02 can be fitted with a BH-02 series of railings to arrange railing systems of various configurations. Made in the same style they will perfectly fit and will give your entrance way a complete look.

### Materials and Finishes

End posts – stainless steel pipe, D-50 mm.

Swing panel – stainless steel pipe, D-32 mm.



Stainless steel





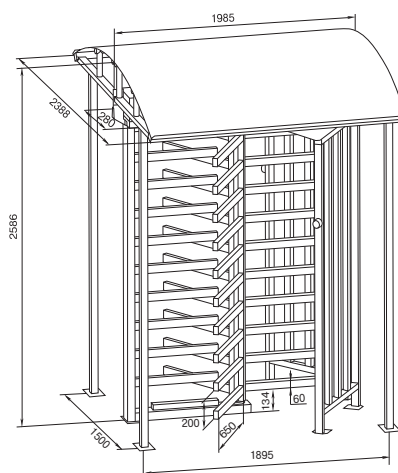
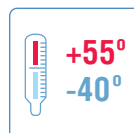
RTD-15.2 full height rotor turnstile, refrigeration equipment manufacture of ARNEG Company, Padua, Italy



RTD-15 full height rotor turnstile, seaport, Trieste, Italy



## RTD-15 FULL HEIGHT ROTOR TURNSTILES



LED directional indicator



Walkway downlights

### Application

The RTD-15 series rotor turnstiles are designed for complete and secure closure of the passageway and used for control of access at locations with high security requirements.

### Delivery set

- turnstile with built-in electronics
- guide barrier set
- remote control panel

### Options

- RTC-15 protective canopy for greater security and protection of the turnstile elements
- WHD-15 full height security gate
- MB-15 full height railings
- Foundation frame with the openings and holes to ease installation of the full height turnstile

### Models

- RTD-15.1 motorized
- RTD-15.2 electromechanical

### Materials and Finishes

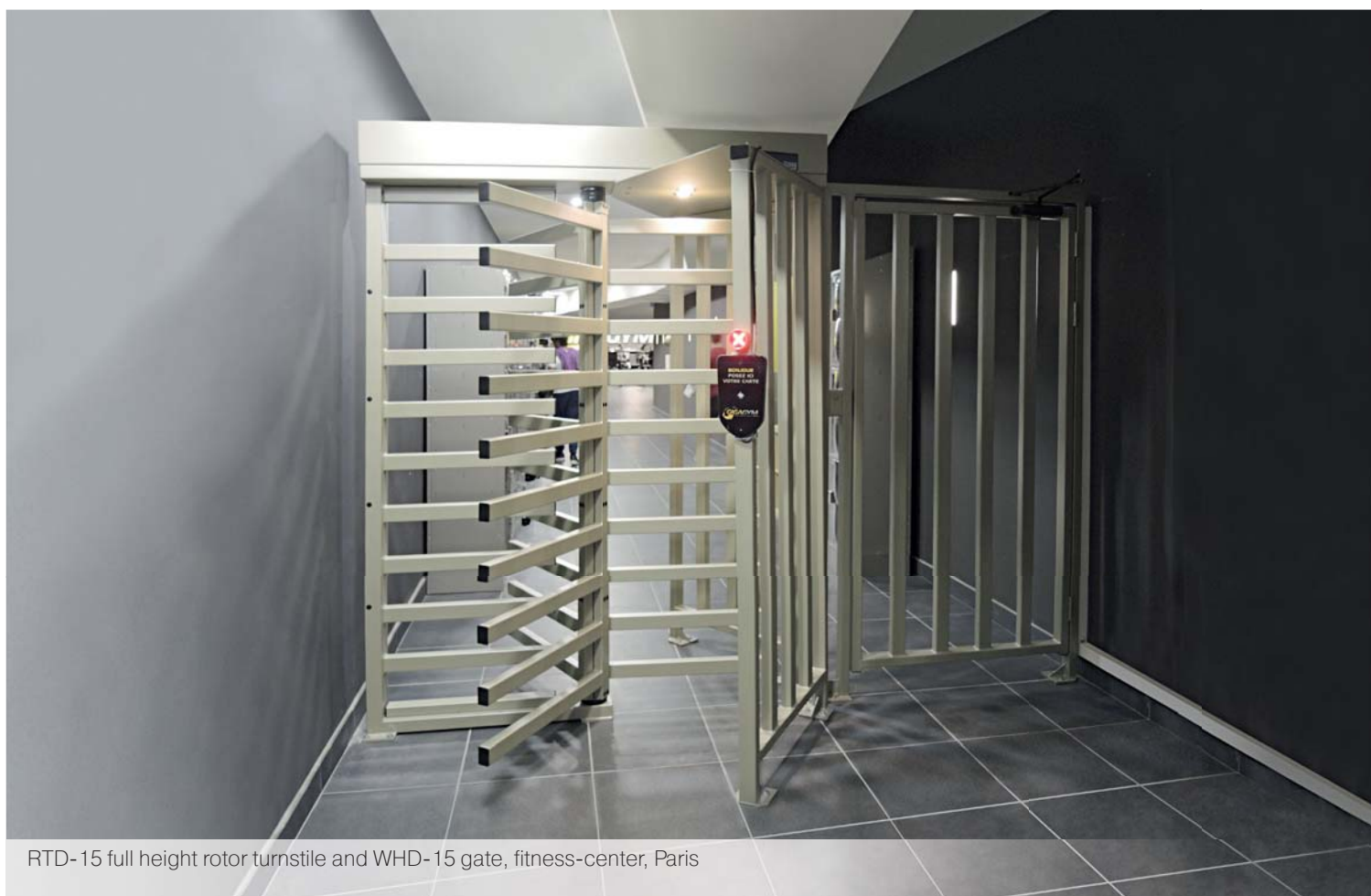
Corrosion protected powder coated aluminium frame. Sandpaper powder coating with pearl mica effect:



light beige

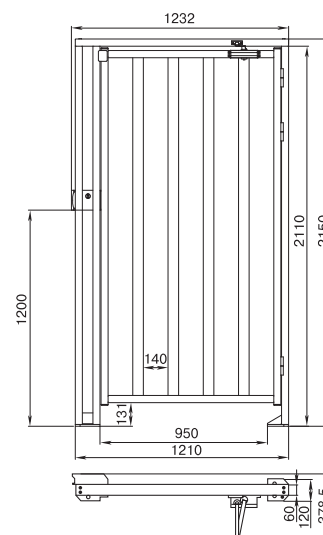
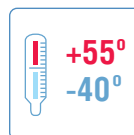


RTD- 15 full height rotor turnstile and WHD- 15 gate, Selectel, Saint Petersburg



RTD- 15 full height rotor turnstile and WHD- 15 gate, fitness-center, Paris

## WHD-15 FULL HEIGHT SECURITY GATE



Door closer



Electric lock

### Application

The WHD-15 security gate is designed for secure closure of the passageway and used for control of access at locations with high security requirements. The gate enables wheelchair access and movement of bulky items.

The gate can be used either as a stand-alone unit with an electric lock or as part of access control system.

### Delivery set

- assembled gate
- electric rim lock
- door closer with fasteners

### Options

- for indoor and outdoor application
- single-direction swing gate

### Materials and Finishes

Corrosion protected powder coated aluminium frame. Sandpaper powder coating with pearl mica effect:



light beige





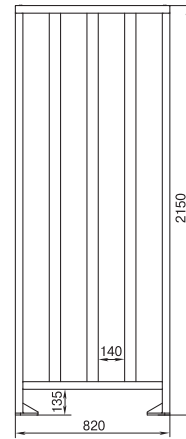
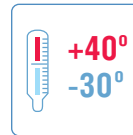


RTD-15 full height rotor turnstiles, labour migration center, Moscow

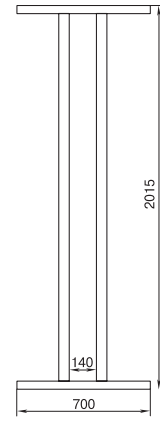


RTD-15.1 full height rotor turnstiles, Jebel Ali seaport, Dubai, UAE

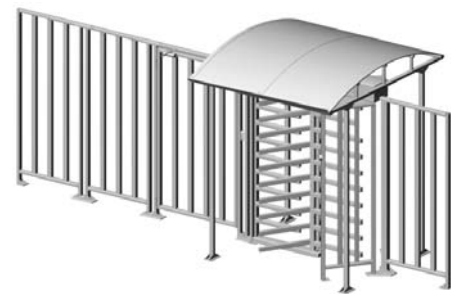
## WHD-15 FULL HEIGHT RAILINGS



MB-15R



MB-15D



### Application

The MB-15 full height railings are meant to complete passage ways equipped with full height turnstiles of RTD-15 series. Used in combination with RTD-15 full height turnstiles/full height security gates, they will ensure a completely enclosed secure passage area.

With high corrosion protection of the aluminum alloy frame the railings will withstand many years of harsh environmental exposure.

### Options

The MB-15 full height railings can be used together with extension sections and middle post sections to fill the smaller gaps between the full height elements to make the passage even more secure. Purposely designed brackets and mounting plates will properly connect all the elements (full height security gates, turnstiles and railings) in one robust secure construction.

### Materials and Finishes

Frame – powder coated aluminum.

Sandpaper powder coating with pearl mica effect:



light beige



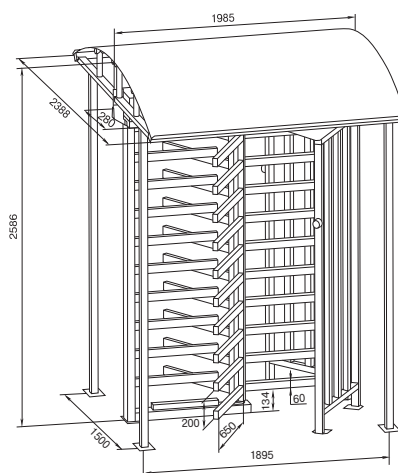
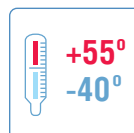


RTD-16 full height rotor turnstile, manufacture «Energomash», Kaluga, Russia



## RTD-16 FULL HEIGHT ROTOR TURNSTILES

NEW



LED directional indicator



Walkway downlights

### Application

The RTD-16 series rotor turnstiles are designed as a cost-efficient solution for complete and secure closure of the passageway and used for control of access at locations with high security requirements.

### Delivery set

- turnstile with internal electronics
- guide barrier set
- remote-control panel

### Options

- RTC-16 protective canopy for greater security and protection of the turnstile elements
- WHD-16 full height security gate
- MB-16 full height railings
- Foundation frame with the openings and holes to ease installation of the full height turnstile

### Models

- RTD-16.1 motorized
- RTD-16.2 electromechanical

### Materials and Finishes

Corrosion protected galvanized steel frame.  
Dark blue powder coating:



dark blue

Stainless steel rotor for RTD-16.1S/RTD-16.2S models.



Stainless steel





## PERCo mortise locks are designed to operate as a part of access control system.

PERCo mortise locks are designed to operate as a part of access control system.

PERCo Company manufactures three series of locks: LB-series, LBP-series and LC-series. LB and LC series are used to lock the doors of small and medium thickness from 38mm to 50mm while LBP series is used to lock the profile doors.

LB-series is the new unparalleled development of PERCo Company. Voltage is supplied through contacts in the locking bolt of LB-series lock. Power cable and control cable are connected through the strike plate in the door frame, not through the door leaf that makes installation easier and provides aesthetically pleasing exterior of the door.

LPB-series is supplied with one of two types of strike plates which can be used for profile doors of different manufacturers («Petrallyum», «Agrisovgaz», «ALUTECH», «NORDPROF» etc); the strike plate type is chosen by a customer at the time of order.

Control cable of LC-series locks is connected in a standard way, through the door leaf. LC-series locks have two operating modes – day-time mode (with a short bolt-throw) and night-time mode (with an extended bolt-throw).

Each series contains models that differ with control mode (normally closed/normally open).

The table shows distinctive features of PERCo locks, including centre-to-centre spacing.

### How to choose PERCo lock?

Operating principle.

Model	Power connection	Control mode	Centre-to-centre spacing	Type of locking bolt
LB72.1	with terminal block	Opens when energized (NC)	72 mm	Flat locking bolt, with blocker roll
LB72.2	with terminal block	Opens when de-energized (NO)	72 mm	Flat locking bolt, with blocker roll
LB85.1	with terminal block	Opens when energized (NC)	85 mm	Flat locking bolt, with blocker roll
LB85.2	with terminal block	Opens when de-energized (NO)	85 mm	Flat locking bolt, with blocker roll
LBP85.1	with terminal block	Opens when energized (NC)	85 mm	Flat locking bolt, with blocker roll
LBP85.2	with terminal block	Opens when de-energized (NO)	85 mm	Flat locking bolt, with blocker roll
LC72.3	without terminal block	Opens when energized (NC)	72 mm	Skewed locking bolt, with day/night switch
LC72.4	without terminal block	Opens when de-energized (NO)	72 mm	Skewed locking bolt, with day/night switch
LC85.3	without terminal block	Opens when energized (NC)	85 mm	Skewed locking bolt, with day/night switch
LC85.4	without terminal block	Opens when de-energized (NO)	85 mm	Skewed locking bolt, with day/night switch

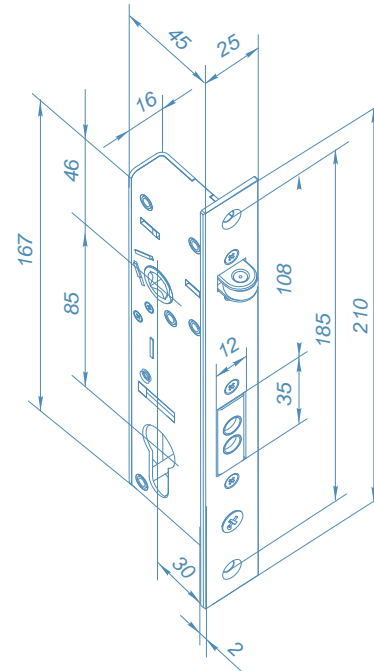
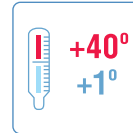
Place of installation	Required type of lock	Corresponding lock models
Premises with standard safety requirements – offices, accountant departments, warehouses, staff rooms.	Normally-closed electromechanical lock with potential operating mode – opens when energized. When the power is off, the lock can be unblocked mechanically with a key or thumbscrew (from inside).	LB72.1 LB85.1 LC72.3 LC85.3
Premises with high public safety requirements – emergency, staircase and elevator exits, childcare, educational and healthcare facilities.	Normally-open electromechanical lock with potential operating mode – opens when de-energized. The lock opens in any situation (ACS controller failure, damaged cable, power loss).	LB72.2 LB85.2 LC72.4 LC85.4

All models of PERCo electromechanical locks work in potential operating mode – control signal from ACS shall be sent and kept active until the door is open. Control signal is not required for door closing. The lock can be also unblocked by a lock cylinder (by key from outside, by key or by thumbscrew from inside).



## LBP-SERIES ELECTROMECHANICAL LOCKS

NEW



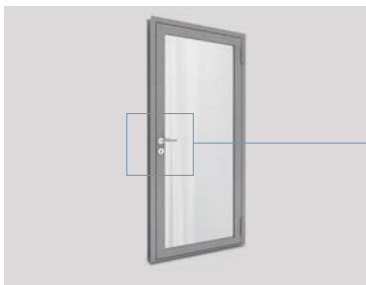
### Application

LBP series is designed to work as a part of access control systems (ACS) and is used to lock the profile doors. The locks have a unique construction, allowing control cable installation through the strike plate in the door frame and not through the whole door leaf. This makes installation easier and provides aesthetically pleasing exterior of the door without using adaptors.

### Materials and Finishes



Stainless steel



## Delivery set

- electromechanical mortise lock
- strike plate with terminal block
- assembly set for lock and strike plate installation
- installation template.

MODEL	POWER CONNECTION	Control mode	Centre to-centre spacing	Type of locking bolt
LBP85.1	with terminal block	Opens when energized (NC)	85 mm	Flat locking bolt, with blocker roll
LBP85.2	with terminal block	Opens when de-energized (NO)	85 mm	Flat locking bolt, with blocker roll

## Design

Key features of the LBP-series locks:

- the lock can be installed in profile doors;
- the lock has a unique construction, allowing to connect lock control cable through the strike plate in the door frame, not through the door leaf, which makes installation easier;
- when the lock is connected with PERCo-CL05.1 and PERCo-CL201.1 controllers, it can be operated without reed switch, having the terminal block operate instead;
- the lock is designed for use with standard lock cylinders;
- a universal lock construction enables its installation on both right-handed and left-handed doors;
- all components of the lock and strike plate have corrosion-resistant coating;
- the lock is resistant to self-opening (for instance, as a result of a hard kick on the door);
- the design of the lock does not require preventive maintenance and lubrication from the customer for the entire period of operation;
- the lock has low power consumption (max 2 W).

All models of PERCo electromechanical locks work in potential operating mode – control signal from ACS shall be sent and kept active until the door is open. Control signal is not required for door closing. The lock can be also unblocked by a lock cylinder (by key from outside, by key or by thumbscrew from inside).

When the door is open the locking bolt moves inside the housing, the blocker roll pulls out automatically. When the door is closed the blocker roll starts sliding on the strike plate and moves inside the lock housing that causes the locking bolt to pull out and the lock to close automatically.

Bolt throw is 15 mm long.



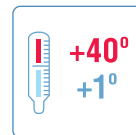
Contact groups in locking bolt and under strike plate



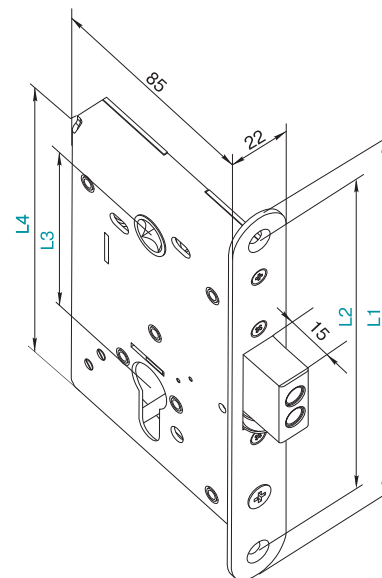
Blocker roll



Pulled out locking bolt

**LB-SERIES** ELECTROMECHANICAL LOCKS**12 V DC**

power supply



LEGEND	LB72	LB85
L1	172 mm	187 mm
L2	150 mm	165 mm
L3	72 mm	85 mm
L4	127 mm	140 mm

**Application**

LB-series lock is the new unique development of PERCo company. Voltage is supplied through contacts in the locking bolt of LB-series lock. PERCo electromechanical mortise locks are designed to lock the doors of small and medium thickness from 38 mm to 50 mm. Each series contains 4 models that differ in control mode (normally closed/normally open) and centre-to-centre spacing.

**Delivery set**

- electromechanical mortise lock
- strike plate
- screw 4x30
- installation template.

**Materials and Finishes**

Stainless steel





MODEL	POWER CONNECTION	Control mode	Centre to-centre spacing	Type of locking bolt
LB72.1	with terminal block	Opens when energized (NC)	72 mm	Flat locking bolt, with blocker roll
LB72.2	with terminal block	Opens when de-energized (NO)	72 mm	Flat locking bolt, with blocker roll
LB85.1	with terminal block	Opens when energized (NC)	85 mm	Flat locking bolt, with blocker roll
LB85.2	with terminal block	Opens when de-energized (NO)	85 mm	Flat locking bolt, with blocker roll



Flat locking bolt 15 cm



Blocker roll



Contact groups in locking bolt and under strike plate

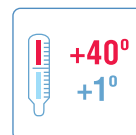
## Design

Key features of the LB-series locks:

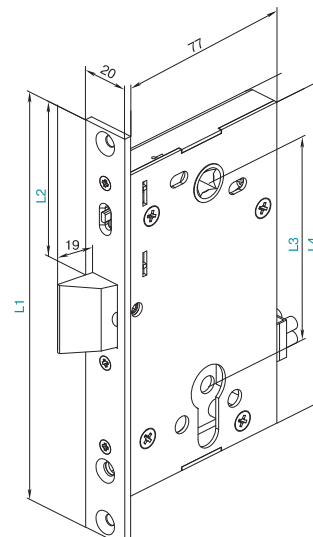
- **voltage is supplied through contacts in the locking bolt.** Power cable and control cable are connected through the strike plate in the door frame, not through the door leaf that makes installation easier and provides aesthetically pleasing exterior of the door while preserving the integrity of the door leaf.
- door post is protected from damage. The door can be closed easily without any efforts required
- mechanical unlocking with a key
- low power consumption
- can be used with right-hand and left-hand doors
- with a standard centre-to-centre hole spacing between lever and the cylinder (72 mm, 85 mm) the LB locks can be put in place of mechanical locks without replacing or reconstructing the door the locks are compatible with standard levers, handles, lock cylinders and escutcheon plates
- all elements of the lock case, including lock bolt have corrosion-resistance coating
- the locks are resistant to self-opening, for instance as the result of a hard kick on the door
- LB locks do not require any service during life-time.

All models of PERCo electromechanical locks work in potential operating mode – control signal from ACS shall be sent and kept active until the door is open. Control signal is not required for door closing. The lock can be also unblocked by a lock cylinder (by key from outside, by key or by thumbscrew from inside).

**When the door is open the locking bolt moves inside the housing, the blocker roll pulls out automatically. When the door is closed the blocker roll starts sliding on the strike plate and moves inside the lock housing that causes the locking bolt to pull out and the lock to close automatically. Bolt throw is 15 mm long.**

**LC-SERIES** ELECTROMECHANICAL LOCK

**12 V DC**  
power supply



LEGEND	LC72	LC85
L1	150 mm	170 mm
L2	58,8 mm	62,3 mm
L3	72 mm	85 mm
L4	121 mm	134 mm

**Application**

PERCo locks of LC-series are electromechanical mortise door locks designed for use in an access control system (ACS) to control light and medium office doors. The locks are used in wooden and steel doors 38-77 mm thick (installation in other types of doors is related to capability to fit mortise pocket).

**Delivery set**

- electromechanical mortise lock
- strike plate
- screw 4x30
- installation template.

**Materials and Finishes**

Stainless steel

## Design

Key features of the LC-series locks:

- mechanical unlocking with a key
- operates in a day-time and a night-time modes (further bolt throw)
- low power consumption
- can be used with right-hand and left-hand doors
- with a standard centre-to-centre hole spacing between lever and the cylinder (72 mm, 85 mm) the LC locks can be put in place of mechanical locks without replacing or reconstructing the door
- the locks are compatible with standard levers, handles, lock cylinders and escutcheon plates
- all elements of the lock case, including lock bolt have corrosion-resistance coating
- the locks are resistant to self-opening, for instance as the result of a hard kick on the door
- the LC locks do not require any service during life-time.

In day-time locking mode the bolt throw is 11 mm, and it is 19 mm in night-time locking mode. In order to change day-time mode to night-time mode, while the door is open move up the day/night mode switch on the forend as far as it goes.

Opening of the lock in night-time mode is similar to the one in day-time mode. The lock will automatically return to day-time mode after that.

MODEL	CONTROL MODE	Centre-to-centre-spacing
LC72.3	Opens when energized (NC)	72 mm
LC72.4	Opens when de-energized (NO)	72 mm
LC85.3	Opens when energized (NC)	85 mm
LC85.4	Opens when de-energized (NO)	85 mm

The locks are operated in potential control mode. The fail-secure (NC) lock opens at energizing, while the fail-safe (NO) lock opens at de-energizing.

For regular operation an ACS controller, controlling the lock, should have possibility of connecting reed switch to it.

To open the lock an ACS controller should energize/de-energize the lock and keep it energized/de-energized till the moment the door opens (this is possible either by signal from a reed switch or by signal of certain duration).

The lock opens by turning the lever after the locking device is released. Before the locking device is released the lever is blocked from turning.

You just need to shut the door to lock it.



Day-time locking



Night-time locking



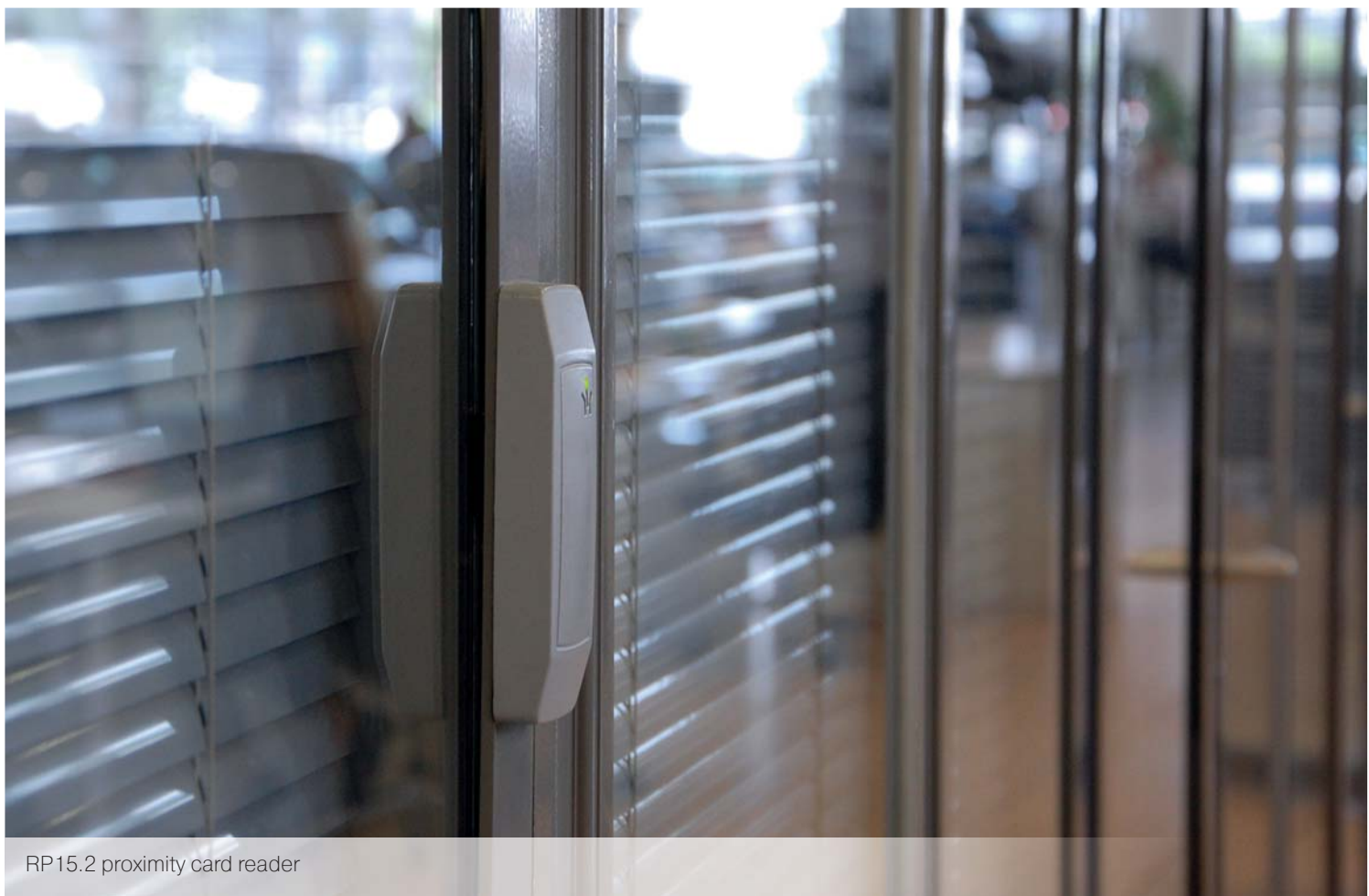
Day/night mode switch



## Wiegand Interface readers and card capture readers



IR-10 long range card reader for vehicle checkpoints



RP15.2 proximity card reader

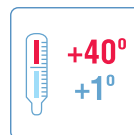
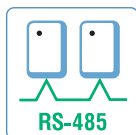
## WIEGAND INTERFACE READERS AND CARD CAPTURE READERS

Readers with Wiegand interface connection with a controller can be used as a part of systems of most manufacturers.

Card capture readers with Wiegand interface can be used in access control systems that allow division of pedestrians on Employee/ Visitor principle.

Description of readers and card capture readers with RS-485 interface can be found in «PERCo-Web access control system» on pages 21-27.

### IRP-01 READER POST WITH LCD DISPLAY



#### Application

The IRP-01 reader post is an elegant solution designed to read proximity cards and to display the information if the access is denied or granted.

The IRP-01 can be applied as a part of PERCo-Web system or can be integrated in the systems of other manufacturers. The IRP-01 operates through two types of interfaces – RS-485 or Wiegand, the output format must be selected and set at the time of installation.

#### Design

The radio-transparent top cover is made of glass. Under the top cover there are a reader control board and an LCD display with animated indication of operational modes.



Control



Open



Closed



Verification  
process

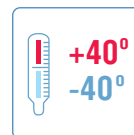
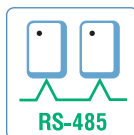
Card reading distance for EM-Marin cards – not less than 7 cm, for HID cards – not less than 6 cm. The card reading is confirmed by an audible signal.

#### Materials and Finishes

Card reader post – stainless steel

Top cover – tempered glass

## IR-10 LONG RANGE (100CM) CARD READER FOR VEHICLE CHECKPOINTS



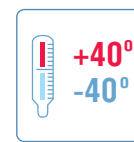
### Application

The IR-10 long range card reader for outdoor use is designed for reading EMM and HID proximity cards and the max. card reading distance is 100 cm. Operates through RS-485 or via Wiegand interface.

### Materials and Finishes

Reader body - ABS plastic

## RP15.2 PROXIMITY CARD READER



### Application

RP15.2 proximity card reader is designed for reading and interpretation of the code that is contained in the access card and for transmitting of this code to the ACS controller. Operates through Wiegand interface.

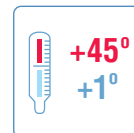
### Design

This table shows the color of the housing in accordance with reader model.

READER MODEL	COLOR
RP15.2B	Beige
RP15.2D	Dark grey



## IC-03 CARD CAPTURE READER



Capturing guest card



Presenting personnel card

### Application

The IC-03 card capture reader is designed to operate within an ACS as a device for reading, capturing and keeping proximity cards issued to visitors and meant for return at exit.

### Design

The IC-03 card capture reader with a Wiegand interface connection with a controller is integrated into access control systems capable of recognizing Personnel/Guest cards. The IC-03 card capture reader is used to capture and store guest cards, when visitors are required to return the card upon leaving the facility.

The card capture reader operates with HID and EM-Marlin cards. The IC-03 operates together with an ACS controller and an operating device, such as a turnstile or a swing gate.

One of advantages of the PERCo card capture reader is ease and handiness in installation, use and service.

When leaving a facility a visitor drops the guest card down the card capture reader slot. After the card falls down to the card container an operating device unlocks allowing the visitor to pass.

Staff with permanent personnel cards can use the card capture reader as a regular reader. To pass just present the card at the card capture reader, the card will not fall down the card container.

### Materials and Finishes

Housing – stainless steel

Card reading distance for EM-Marlin cards – 8cm,  
for HID cards – 6 cm

The card container capacity – 350 cards



PERCo headquarters

## About PERCo

PERCo is the leading Russian manufacturer of security systems and equipment. We design, manufacture and successfully market turnstiles, gates, railings, electromechanical locks and access control systems that meet international standards of the security industry.

### PERCo in brief

- 28 years of expertise in the security industry
- Installations in 82 countries worldwide
- R&D centre and manufacturing plant
- Over 15,000 sq. m of production space
- More than 500 skilled employees
- Compliance with ISO 9001:2008 international standard
- Serially manufactured products ready to be shipped from stock
- Warehouses in Russia and duty-free warehouse in the EU





Manufacturing plant in Pskov



Sheet metal working shop





Powder coating line



Shipping

# 28 years worldwide



Albania	Czech Republic	Kazakhstan	New Zealand	Sri Lanka
Armenia	Estonia	Kenya	Nigeria	Sweden
Australia	Finland	Kyrgyzstan	Norway	Switzerland
Austria	France	Kuwait	Pakistan	Taiwan
Azerbaijan	Georgia	Latvia	Philippines	Tajikistan
Bahrain	Germany	Lebanon	Poland	Thailand
Bangladesh	Greece	Libya	Romania	Turkmenistan
Belarus	Hungary	Lithuania	Portugal	Tunisia
Belgium	Iceland	Macedonia	Russia	UAE
Benin	India	Malaysia	Saudi Arabia	Uganda
Bosnia and Herzegovina	Iran	Malta	Serbia	UK
Bulgaria	Ireland	Mexico	Singapore	Ukraine
Cameroon	Israel	Moldova	Slovakia	Uzbekistan
China	Italy	Mongolia	Slovenia	Vietnam
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