

## **Application**

KTO2.9 IP-Stile is a ready-for-use access control system based on a tripod turnstile. The IP-Stile features:

- IP-Stile housing with a built-in controller and two proximity readers
- RC-panel (buttons orientation is to be set upon connecting the panel)
- Software



RC-panel

#### The IP-Stile can operate:

- as a standalone unit local software or Web-interface allow assigning cards and checking the events log; operation from RC-panel and WRC is available
- as a part of PERCo-Web ACS: all system characteristics are available; operation from RC-panel and WRC is available

IP-Stile is equipped with readers of the following formats:

- 1. EMM/HID,
- 2. MIFARE reading:
  - either unique identifier UID, or cryptoprotected data from the internal memory of the card (additional programming of readers and cards is required)
  - UID from payment cards supporting PayPass contactless payment method
  - Android smartphones with NFC function reading unique identifier (IMSI), linked to phone's SIM-card (installation and launch of free "PERCo. Access" application is required)
  - Apple smartphones with NFC function reading unique identifier (Token), linked to a bank card if several bank cards are linked, the Token of the currently active card is scanned)

Ethernet (supports the TCP/IP (ARP, IP, ICMP, TCP, UDP, DHCP protocol stack) is a connection interface with a computer and other controllers of the system.

To calculate the number of necessary IP-Stiles it is recommended to install one turnstile per 500 people working the same shift and based on a maximum working load of 30 persons/min.

KT02.9 IP-Stile is a serially produced product certified for compliance with applicable Russian and European CE standards.



# Optional equipment

It supports the RS-485 interface connection of the following devices:

- up to 8 CL201.1 lock controllers (CL201.1 controller has a built-in EMM/HID reader and provides control of one lock)
- IC-05 card capture reader (for connection layout see IC-05 description)

## Configuration

Through the Web-interface users are able to choose one of the following variants of the IP-Stile controller memory allocation:

- 50,000 cards and 230,000 events set by default,
- 40,000 cards and 390,000 events,
- 30,000 cards and 550,000 events,
- 20,000 cards and 710,000 events,
- 10,000 cards and 870,000 events.

### Main features

#### KT02.9 IP-Stile features:

- built-in grant / denial indication of passage and operating mode
- built-in hydraulic damper
- possibility of mechanical release with a key
- possibility of intrusion detector, siren and other optional equipment, also, emergency release device connection
- Web-interface integrated into the controller for initial setting and current parameter control

#### Built-in reader





Pictogram indication block

Mechanical release

### Design

The IP-Stile is made of powder-coated steel. The housing colour is dark grey with a pearl mica effect.

The top cover and barrier arms are made of stainless steel.

The IP-Stile can be equipped with two models of barrier arms:

Barrier arms model	Barrier arms
AS-01	Standard
AA-01	With mechanical anti-panic function



Mechanical anti-panio

## **Operating** conditions

The IP-Stile, with regard to resistance to environmental exposure, complies with GOST 15150-69 category NF4 (operation in premises with climate control). The IP-Stile should be operated at ambient air temperature from  $+1\,^{\circ}\text{C}$  to  $+50\,^{\circ}\text{C}$  and relative air humidity of up to 80% at  $+25\,^{\circ}\text{C}$  (non-condensing).

## **Delivery set**

Standard delivery set		
KT02.9 IP-Stile housing (with CT03.2 controller board installed)	1	
Barrier arm (model to be chosen when ordering)	3	
Key to top cover lock	2	
Key to mechanical release lock	2	
RC-panel with cable	1	
Mounting kit	1	
Documentation set	1	



Optional equipment (upon request)		
Power supply	1	
WRC kit (features a receiver and two transmitters (fobs)) with operation range of up to 40 $\mbox{m}$	1	
Intrusion detector (installed by the manufacturer upon request)	1	
Siren	1	
CL201.1 lock controllers	up to 8	
PoE-splitter	1	
SORMAT PFG IR 10-15 anchor bolts	4	

# Technical specifications

Operating voltage*	12±1.2V DC		
Current consumption, max.	0.8 A		
Power consumption, max.	10 W		
Overall dimensions with barrier arms installed (L×W×H)	640x683x1040 mm		
Passageway width	500 mm		
RC-panel cable length	14 m		
Net weight, max.	35 kg		
Number of users (access cards)	from 10,000 to 50,000		
Number of events	from 230,000 to 870,000		
Communication interface standard	Ethernet (IEEE 802.3)		
Number of readers	2		
Proximity cards format	EMM, HID, Mifare		
Card reading distance at the nominal operating voltage, min.	for EMM/HID cards	5-7 cm	
	for MIFARE cards	3-6 cm	
Number of additional inputs	5		
Number of additional relay outputs (NC, C, NO relay outputs)	4		
Electric shock protection class	III (IEC 61140)		
Ingress Protection Rating	IP41 (EN 60529)		
Mean time to failure, min.	4,000,000		
Mean lifetime	8 years		
Throughput rate	in the single passage mode	30 persons / min	
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Ihroughput rate	in the free passage mode	60 persons / min	

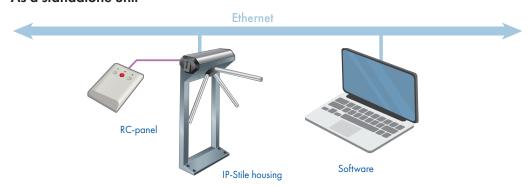
 $<sup>^{\</sup>star}$  It is recommended to use 12 VDC 2A power supply with linear stabilization of voltage and pulse amplitude at output not exceeding 50 mV.

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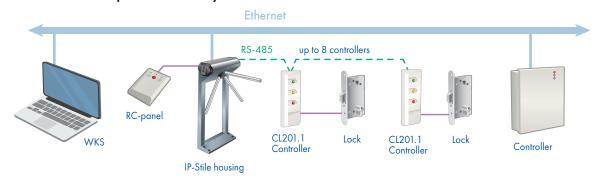


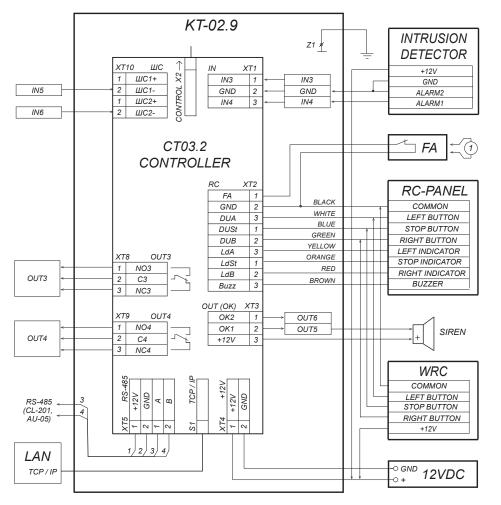
#### Connection

#### As a standalone unit



#### As a part of PERCo system





1 - Jumper wire when there is no fire alarm device

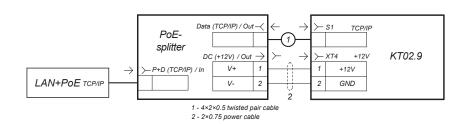
Wiring diagram of external equipment connection to the built-in controller board



The maximum allowed power cable length depends on its cross-section and shall be:

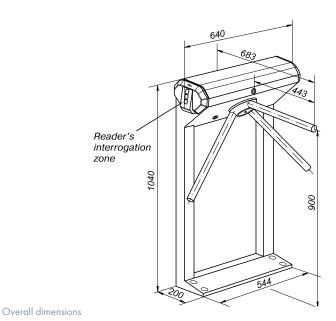
- 0.75 mm<sup>2</sup> cable cross-section 10 m;
- 1.5 mm² cable cross-section 30 m. Recommended cable type is 2x0.75 power cable.

Power supply connection via POE splitter PA 1212

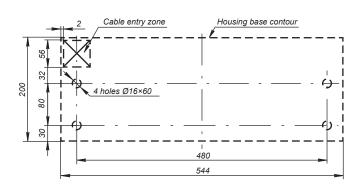


IP-Stile controller connection

## Overall dimensions



## Mounting

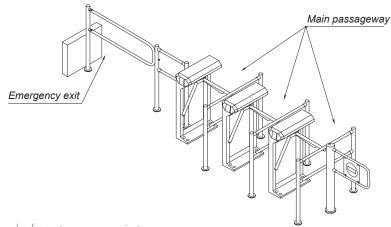


Hole layout

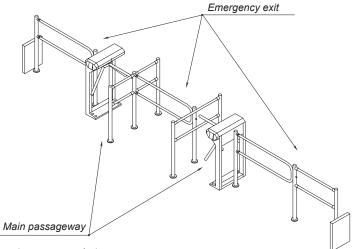
Foundation requirements: concrete (grade 400 or higher), stone or similar foundations of at least 150 mm thick. For the installation of the IP-Stile on a less steady foundation it is recommended to apply reinforcing elements (550×550×200 mm).



# Passage zone modeling



Example of an entrance zone project



Example of an entrance zone project

## Warranty

The warranty period is 5 years commencing from the date of sale if other is not stated in the contract for product delivery. In case of purchase and installation of the equipment by PERCo authorized dealers and service centers, the warranty period starts from the moment of the commissioning.

Should there be no date of sale on the warranty card, the warranty period shall commence from the date of manufacture specified in the Certificate and on the Product label.