






IRP-01 Reader post



 +40 +1 <small>temperature range</small>	 12V <small>operating voltage</small>	 RS-485 <small>interface</small>
 Wiegand <small>interface</small>	 EMM/HID <small>card format</small>	

Application

IRP-01 post with built-in proximity reader and LCD display is designed to read and decode the access card identifier and transfer it to the ACS-controller. IRP-01 reader post is recommended to be installed at sites with high requirements for design and comfort. It is designed to be used indoors. IRP-01 reader post is a serially produced product and is certified for compliance with applicable Russian and European CE standards.

Functionality

The reader provides code reading from Proximity identifiers with operating frequency of 125 kHz produced by HID Corporation, type: ProxCard II and ISOProx II (HID standard formats: 26-bit (H10301), 37-bit (H10302, H10304)) and also identifiers produced by EM Microelectronic-Marin SA. Connection interface with the ACS-controller is RS-485 or Wiegand. Reader housing consists of a stainless steel tubular post on the top of which a reader board and LCD display are mounted. The delivery set includes a post mounting foundation to mount the reader post on the mounting surface. The reader comes with a sound indication. Code reading is confirmed by the signal going on shortly.

Operating conditions

The reader post, with regard to resistance to environmental exposure, complies with GOST 15150-69 category NF4 (operation in premises with climate control). Operation of the reader post is allowed at ambient air temperature from +1 °C to +40 °C and relative air humidity up to 80% at +25 °C.

Delivery set

Reader post	1
Foundation	1
Mounting kit	1
Documentation set	1
Optional equipment (upon request)	
SORMAT PFG IR 8-20 anchor bolts	4

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Technical specifications

Rated operating voltage *	12 V DC	
Operating voltage limits	10.8-14 V DC	
Current consumption	max. 150 mA	
Power consumption	max. 2 W	
Overall dimensions	1025x107x107 mm	
Reading distance	for EMM cards	min. 7 cm
	for HID cards	min. 6 cm
Connection interface **	485, Wiegand	
Distance between the reader and external controller	max. 40 m	
Mean lifetime	8 years	
Reader post weight	max. 5 kg	

* It is recommended to use power supply with linear stabilization of voltage and pulse amplitude at output not exceeding 50 mV.

** Depends on the position of the tumbler #1 in SA1 DIP-switch.

Controller operating modes indication



Control



Open

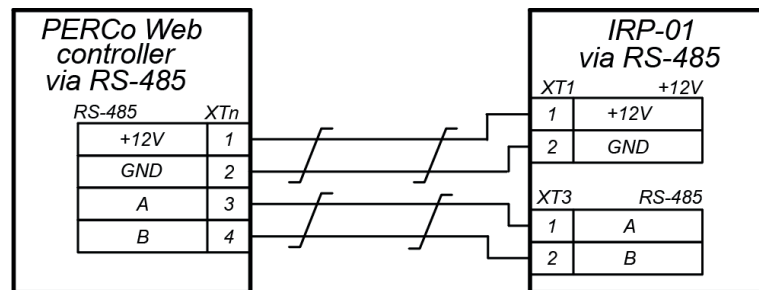


Closed

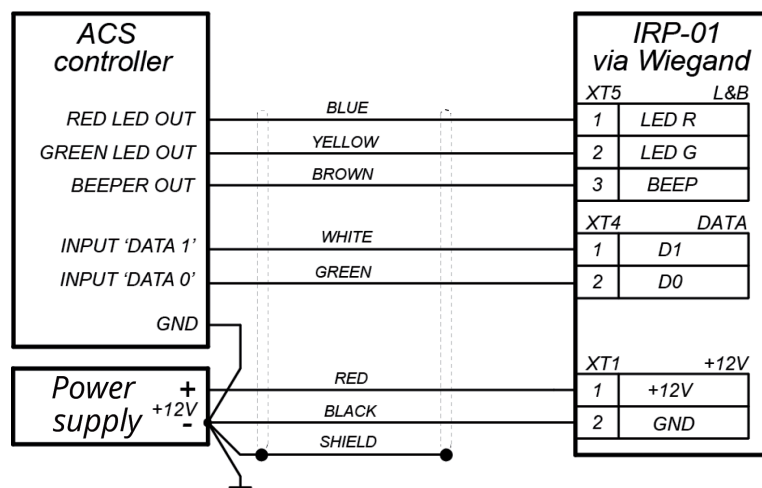


Verification process

Connection



Connection of the reader to PERCo system controller via RS-485 interface



Connection of the reader to ACS-controller via Wiegand interface

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The interface is to be chosen with tumbler #1 in SA1 DIP-switch, located on the reader board:

- ON - connection to RS-485 interface
- OFF - connection to Wiegand interface

Via RS-485 interface

Connection via the RS-485 interface of the reader to the controller is to be carried out using F/UTP2-Cat5e twisted pair, and the A and B signal lines are to be in one twisted pair.

When connected via RS-485, the reader operates according to the protocol of the connection of the readers in the PERCo system and can be used as an external reader for PERCo system controllers.

Setting the reader number on the SA1 DIP-switch		
Reader number	Tumbler	
	Nº1	Nº2
Reader #1	ON	ON
Reader #2	ON	OFF

End-of-line resistor connection	
End-of-line resistor	Jumper #5
connected	installed
disconnected	removed

Via Wiegand interface

Connection via Wiegand interface of the reader to the controller is to be carried out by using CABS8/EC, 8C.SEC-SC shielded cable with 24AWG–18AWG cross-section (0.2 - 0.8 mm²). Kindly note, the use of twisted cables is not allowed.

Reader indication setting on the SA1 DIP-switch		
Indication	Tumbler	
	Nº1	Nº2
"double line"	OFF	ON
"single line"	OFF	OFF

Reader indication in Wiegand mode			
Signal level on control line		Reader indication	
Led R	Led G	"double line"	"single line"
0	0	Waiting for card presentation (Hand with a card)	Access granted (moving green arrow)
0	HZ	Access granted (moving green arrow)	
HZ	0	Access denied (STOP inscription)	Access denied (STOP inscription)
HZ	HZ	Waiting for card presentation (Hand with a card)	

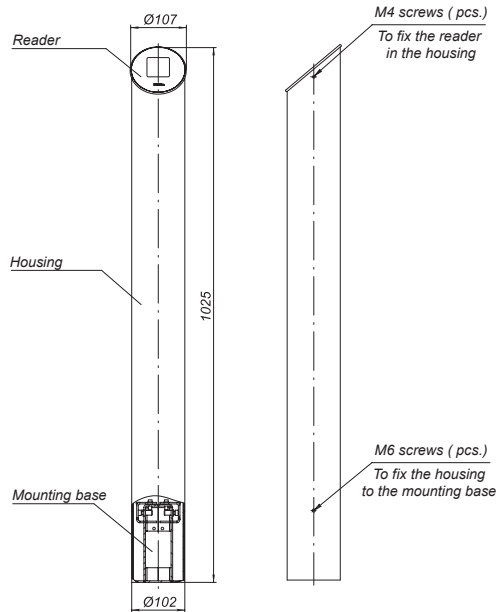
0 - the control line is connected to the power supply negative terminal.

HZ – high resistance on the control line (the line is not connected to the power supply negative terminal).

Reader output data format setting on the SA1 DIP-switch			
Reader output data format	Tumbler		
	Nº1	Nº2	Nº3
Wiegand 26	OFF	ON	ON
Wiegand 37	OFF	ON	OFF
Wiegand 42	OFF	OFF	ON
Wiegand	OFF	OFF	OFF

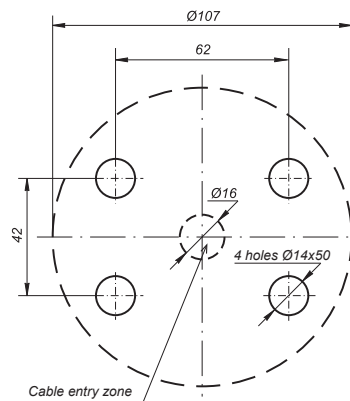
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Overall dimensions



Overall dimensions

Mounting



Hole marking for reader post installation

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