

KAGI

v1.1



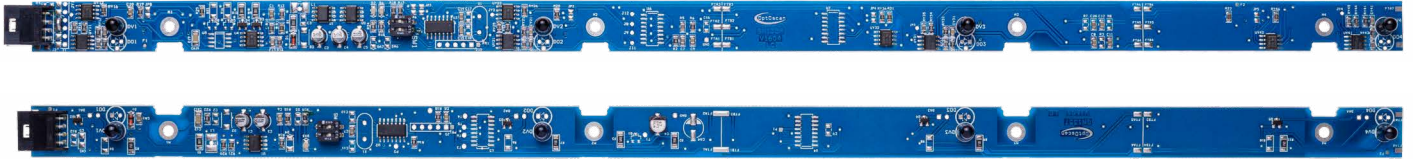
Datasheet

Barriers for access control



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1.1 Barriers for access control



The Kagi series barriers, consisting of a TX and RX circuit, generate from 2 to 4 parallel infrared beams with a 135mm center distance.

With the **SO** option, the interruption of a beam switches the output, while with the **MO** option, thanks to the 4 independent outputs, it allows to monitor the correct passage of people.

Synchronization is optical, so no connections are required between the two units.

The transmission can be coded via a **DIP switch** to avoid interference between two or more barriers. A **Test** input on the transmitter allows verification of the correct functioning of the system.

The high immunity to flash, sunlight, lamps, electrical disturbances allows them to be used even in harsh environments.

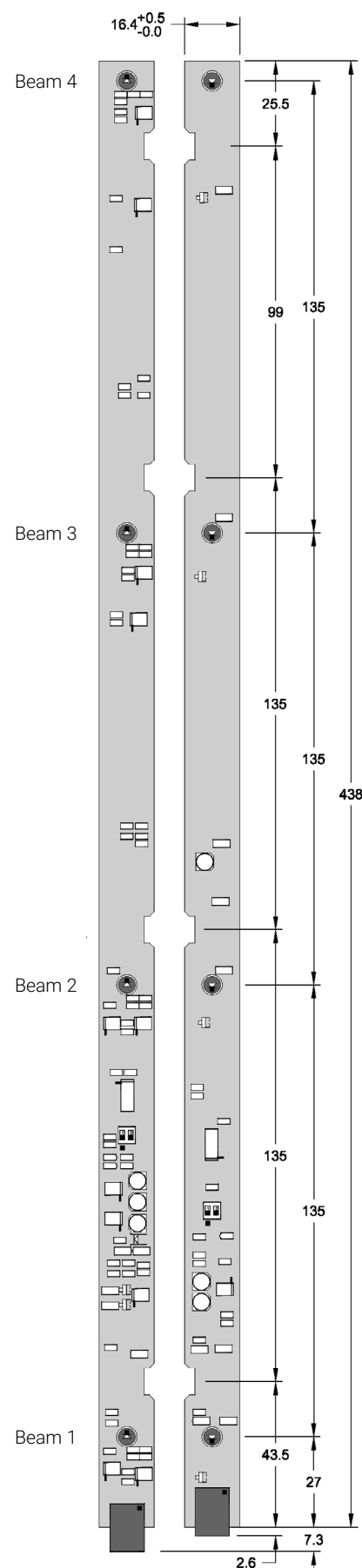
They are supplied without housing, to be easily integrated into the mechanical structure of the application, thanks to the fixing holes on the PCB.

They are specifically designed for access control.

1.2 Technical Specifications

Characteristic	SO output	
Beam center distance	135mm	
Range	0 - 6m	
Lunghezza d'onda	880nm	
Light immunity	>100Klux	
Temperature	da -20°C a +60°C; Maximum relative humidity of 95%	
Supply voltage	24Vcc +/-20%	
Power consumption (RX+TX)	35mA, without load	
Status LED	GREEN LED on TX, flashing when test is activated	
	GREEN/RED LED on RX	
Test input	0 - N.O. (0V active test)	
Response time	10ms	
Reset time	20 - 40ms	
Test activation time	12 - 20ms	
Output	0-24V Push/Pull; I max: 50mA	4x 0-24V Push/Pull; I max: 50mA
Connections*	TX male connector 4 pin AMP MODU II	TX male connector 4 pin AMP MODU II
	RX male connector 4 pin AMP MODU II	RX male connector 6 pin AMP MODU II

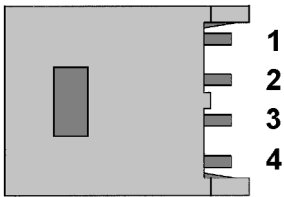
*There are more connection available if required. See the [Connections](#) section.



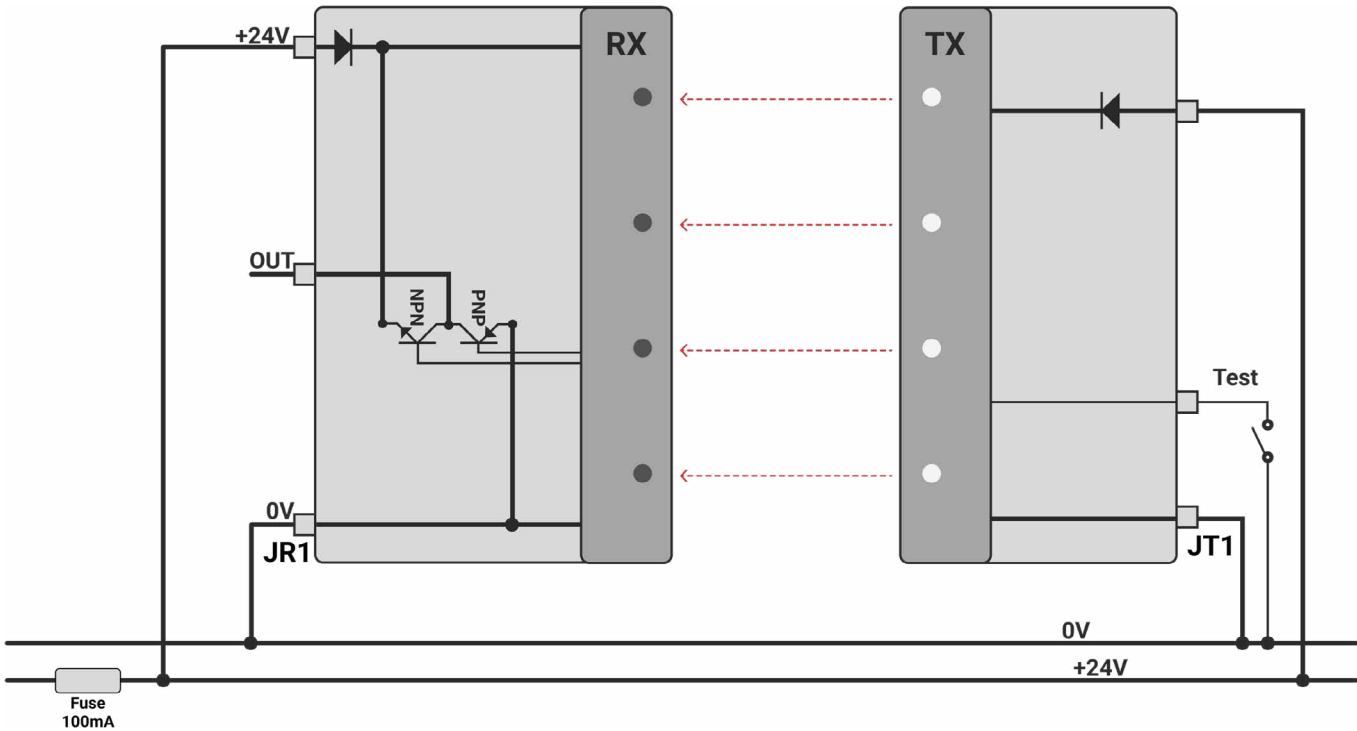
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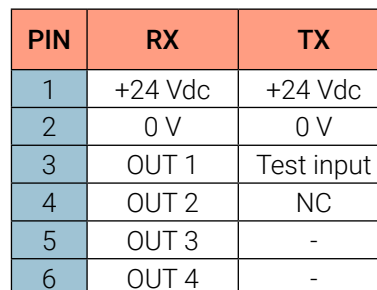
Model	Protected height	Body dimension	Maximum response time	Number of Beams
	mm	mm	ms	#
KAGI 220 Lx	140	219	11	2
KAGI 330 Lx	275	354	11	3
KAGI 440 Lx	410	438	11	4

The *single output* option (SO) is a Push/Pull output that is activated by the interruption of any beam.



PIN	RX	TX
1	OUT	NC
2	OUT	Test input
3	0 V	0 V
4	+24 Vdc	+24 Vdc





4.1 CODE

Option that allows coding the communication between transmitter (TX) and receiver (RX) to eliminate interference in case multiple adjacent barriers are positioned.
The code can be set externally or via an internal selector.

Available only for SO output.

4.2 TEST

Option that simulates the interruption of the beams to allow the verification of the correct functioning of the system.

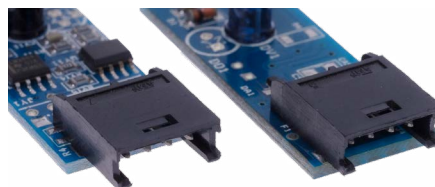
Activable from the outside.

5 Connections

5.1 MODU

Standard connection via AMPMODU MOD II connector on receiver and transmitter.

In case of SO output: 4-pin male MODU connector.
In case of MO output: - RX 6-pin male MODU connector.
- TX 4-pin male MODU connector.



5.2 CavM8

Connection via 30cm long 4-pin male M8 cable.

Available for SO output only.

5.3 CavM12

Connection via 30cm long 4-pin male M12 cable.

Available for SO output only.

5.4 CavM128P

Cable connection: - RX 30cm long 8-pin male M12 cable.
- TX 30cm long 4-pin male M12 cable.

Available for MO output only.

5.5 CavB

Cable connection: - RX 8 wires for MO output or 4 wires for SO output.
- TX 4 wires

6.1 Identification Code

	<i>KAGI 330</i>	<i>L5</i>	<i>CODE</i> <i>T</i>	<i>MO</i>	<i>MODU</i>
MODEL					
<i>KAGI 220 Lx</i>					
<i>KAGI 330 Lx</i>					
<i>KAGI 440 Lx</i>					
PORTATA					
<i>Lx</i>	See Range Table				
OPTION					
<i>CODE</i>	Coding between transmitter and receiver				
<i>T</i>	Input test				
OUTPUT					
<i>SO</i>	Single Output				
<i>MO</i>	Multiple Output				
CONNECTION					
<i>MODU</i>					
<i>CavM8</i>					
<i>CavM12</i>					
<i>CavM128P</i>					
<i>CavB</i>					

6.1.1 Range

Code	Range Lx
L03	from 50 to 300mm
L04	from 100 to 400mm
L05	from 100 to 500mm
L08	from 100 to 800mm
L1	from 200 to 1000mm
L2	from 300 to 2000mm
L3	from 500 to 3000mm
L4	from 500 to 4000mm
L5	from 500 to 5000mm
L6	from 500 to 6000mm



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