



## IRS-320 INFRARED SENSOR

### P1. 1.10.5.4.1

The active infrared sensor forms the basis of the DILAX people counting system. In each case one or more infrared sensors are installed above the doorway, and are set to a suitable detection height. Depending on the width of the doorway, the sensors are installed at particular intervals. Doorways of any width can be fitted with sensors.

### P1. 1.10.5.4.2      P1. 1.10.5.4.3

#### FEATURES

- People detection via triangulation P1. 1.10.5.4.1
  - Infrared light - invisible and safe
  - Easy connection (serially)
  - Power supply and data communication in one cable P1. 1.10.5.4.4
  - Maintenance-free, vandal-proof, IP65, IK08 P1. 1.10.5.2
  - RoHS-compliant, EN 50155-compliant P1. 1.10.5.3
- P1. 1.10.6.1.6

#### FUNCTIONAL DESCRIPTION

### P1. 1.10.5.4.1

The infrared sensor works according to the triangulation method. Infrared light is emitted, reflected by people and detected by the sensor.

The data is sent to the counting unit (PCU) via the serial sensor link (SSL). From the data from all the sensors, the PCU calculates the number of people passing through a doorway in both directions.



Connection example



Simple integration into the vehicle's doorway



Examples of custom installations above entrances

**INSTALLATION**

**P1. 1.10.5.4.2**

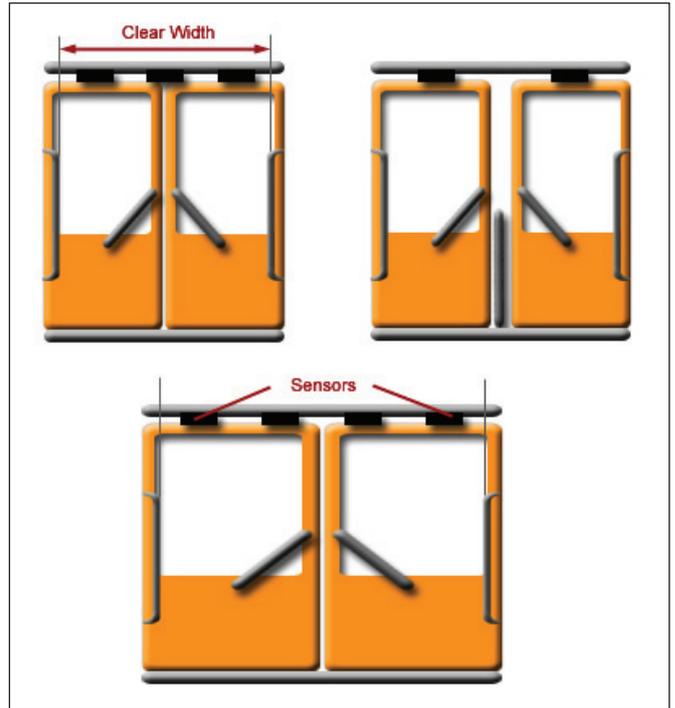
Every sensor is mounted through 4 mounting holes. The sensors are connected serially to the counting unit via an SSL cable. Therefore DILAX offers prefabricated SSL cables.

Various individual mounting and installation methods are possible, depending on the application. DILAX also offers a wide range of installation accessories and panelling.

**Sensor arrangement P1. 1.10.5.4.3**

The correct number of sensors and their arrangement is important for the proper functioning of the counting algorithm, because the signals of all sensors are always evaluated together.

The number of sensors required depends on the width of the doorway. All sensors must be arranged in a straight line. The distance between two adjacent sensors must be approx. 350mm. Please contact DILAX support for assistance for any special configuration of the sensors.



Arrangement examples

**TECHNICAL DATA**

General	
Dimensions (housing l x w x h )	100 x 42 x 25.4 mm (3.94 x 1.65 x 1 inches)
Weight	90 g (0.2 lb)

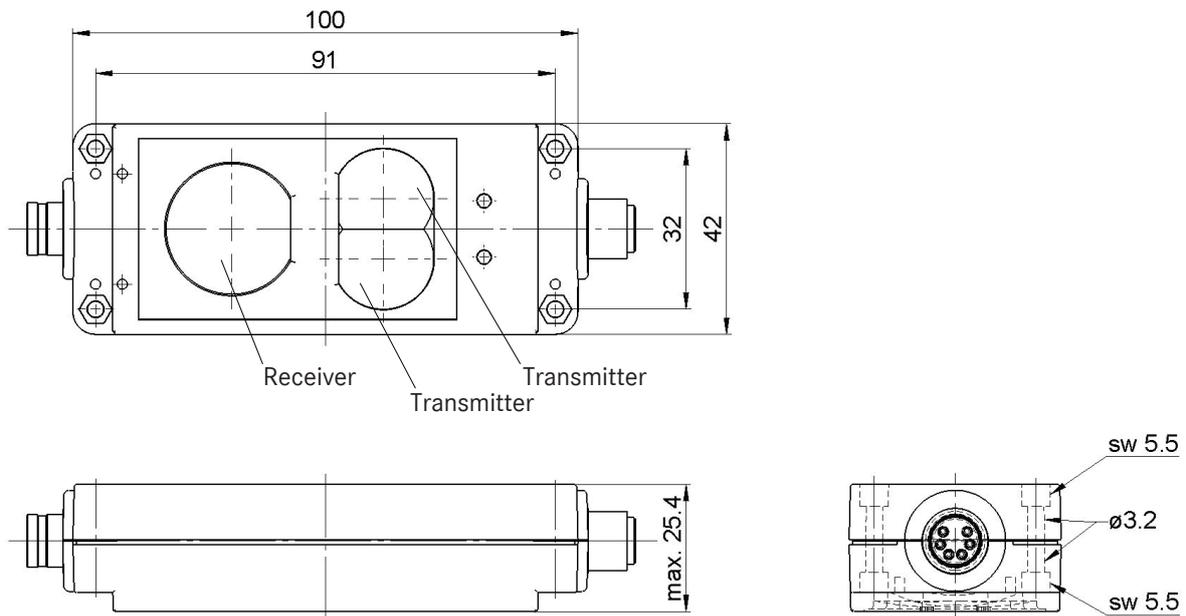
Electrical	
Nominal input voltage	12 V
Current (nom.)	Max. 60 mA (depending on distance)
IR wave length	880 nm

**P1. 1.10.5.2 Environmental**

Operating temperature	-25 °C ... +70 °C	P1 1.10.8.1
Storage temperature	-40 °C ... +70 °C	
Relative humidity	95 %	
Protection	IP65	P1 1.10.8.2
Shock and vibration	EN 61373 category 1, class B	P1 1.10.8.4
EMC	EN 50121-3-2	
Degree of protection against external mechanical impacts, EN 50102	IK08	P1 1.10.8.3
UL94 classification housing	V-0	
Railway application standard	EN 50155	

## DIMENSIONED DRAWINGS

All figures given in millimetres.



## ORDER INFORMATION (preferred variants in bold)

Product number	Description
000.202.054.202	<b>IRS-320R, no cover glass, rectangle</b>
000.202.054.212	<b>IRS-320R, with cover glass, rectangle</b>
000.202.054.242	<b>IRS-320R, with 1.5mm cover glass, rectangle</b>
000.202.052.202	IRS-320, no cover glass, octagon
000.202.052.212	IRS-320, with cover glass, octagon

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