

Installation Guide

1 Introduction

Passenger count sensor SH2 (hereinafter, Sensor) is designed for counting people passing through the detection zone: through the door openings and messages generation by output contacts. The Sensor is resistant to ambient light and small animals movement.

2 Features

- Dual-element pyrodetector;
- «Vertical curtain» detection zone;
- Microprocessor-based signal processing;
- Mounting height is up to 3 m;
- Possibility of LED indication disabling;
- Two-way installation using four fastening surfaces of the Sensor base: either above the protected opening, or in the corners of window openings, door cases, etc.;
- High-level resistance to ambient light – 12 000 lx;
- High-level resistance to electromagnetic interference.

3 Specifications

Table 1

Parameter	Value
Maximum mounting height	3 m
Detection zone type	Vertical curtain
Message duration, not less than	800 ms
Power supply	8 ... 28 V DC
Consumption current, not less than	12 mA
Operating temperature	minus 30 ... +50 °C
Permissible humidity at +25 °C without moisture condensation	Up to 95%
Ambient class	boreal climate*
IP rating	IP41
Dimensions, maximum	80 x 47 x 40 mm
Weight, maximum	0.06 kg
Average time to failure in standby mode, not less than	60 000 hrs
Average service life	8 years

* background temperature 15 – 35 °C, relative humidity 25 – 75 %, air-pressure 86 – 106 kPa.

The Sensor is designed for continuous operation around the clock. The Sensor in its package is resistant to:

a) transport jolting with the acceleration 30 m/sec² with impact frequency from 10 to 120 impacts/sec or 15000 impacts with the same acceleration;

b) the ambient temperature minus 50 ... +50 °C;

c) relative air humidity (95 ± 3) % at the ambient temperature +35 °C.

After transportation in conditions different to exploitation conditions, the Sensor shall be ready to operate after a maximum of 6 hours.

4 Scope of Delivery

Each Sensor unit package contains the items listed in Table 2.

Table 2

Name	QNT
Passenger count sensor SH2	1 pc.
Passenger count sensor SH2. Installation Guide	1 copy

5 LED Indication

Table 3

Mode	LED Indication
Warm-up time	is ON for not more than 40 s after Sensor energizing
Message	800 ms blink
Normal	is Off

LED indicator is used for the Sensor state displaying. To disable the LED, remove jumper IND. Install it on one of pins for the following usage while next testing.

6 Choosing an Installation Place

When choosing locations for the Detector installation, it is advisable to take note of the fact that the detection zone may be limited by non-transparent objects (curtains, curtain holders, door trims, etc.), as well as glass partitions. There must be no air conditioners, space heaters or heating radiators in the Detectors' detection zone. The maximum Detector installation height is 3 m. The Detector installation options are shown in Figure 1.

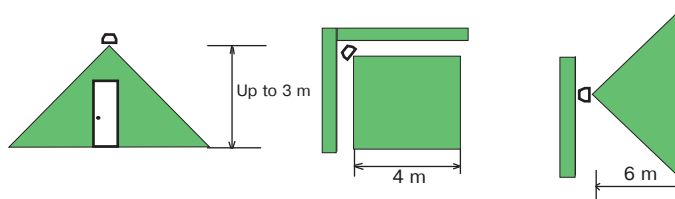
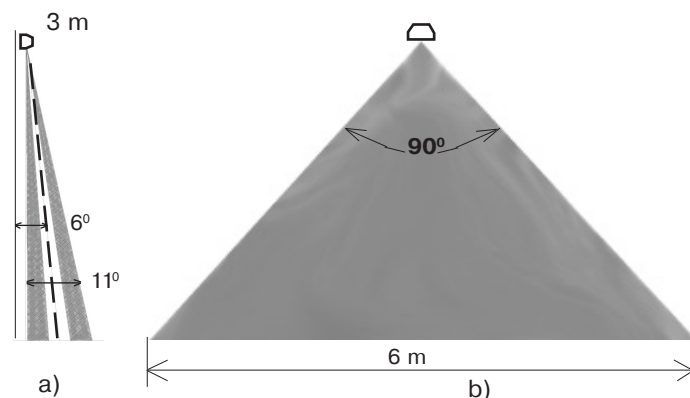


Figure 1

7 Detection Zone Pattern



9 Storage and Transportation

9.1 The Detectors in their original packing may be shipped by any transport means in covered vehicles (in railway, cars, trucks, sealed heated compartments of aircraft, ship cargo holds, etc).

9.2 The storage room should be free from current-conducting dust, acid vapors, alkali and gases that cause corrosion and destroy insulation.

10 Manufacturer's Guarantees

10.1 The Manufacturer guarantees conformity of the Detector to its Technical Specifications if conditions of transportation, storage, assembling and operation are observed. The guaranteed storage period is 28 months since the date of manufacturing the Detector.

10.2 The guaranteed period of operation is 24 months since the date of commissioning within the storage period guaranteed.

10.3 The Detectors that are found to non-conforming to its Technical Requirements shall be repaired by the Manufacturer, provided the installation and operation rules have been complied with.

11 Acceptance and Packing Certificate

Passenger count sensor SH2 has been manufactured in compliance with the active technical documentation and classified as fit for operation and packed by «RIELTA» JSC.

Person in charge of acceptance and packing

QC representative _____ day, year, month