

The APD-100 wireless passive infrared detector is designed for operation as part of the ABAX two-way wireless system.

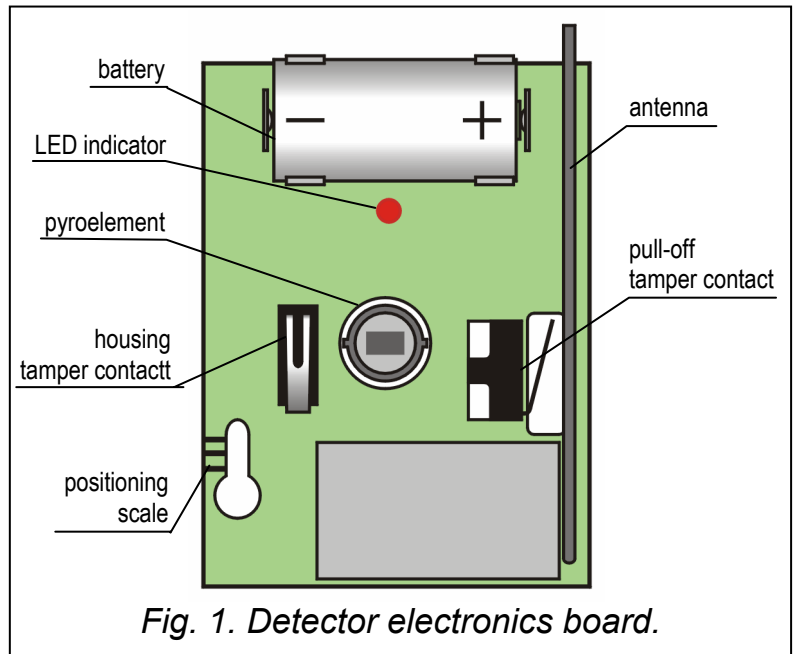
The signal from pyroelement is processed digitally. The sensor is characterized by a high interference immunity. The sensor detection sensitivity is controlled by way of radio.

The LED indicator is "on" in the TEST MODE only (see the ACU-100 controller manual) to signal communication with the controller and violation (of the detector or tamper contact).

As two tamper contacts are installed on the electronics board, tamper information is sent both when the housing is opened, and when the detector is pulled off from the mounting surface.

Placed on the electronics board is a label with 7-digit serial number, which must be indicated when registering the detector in the system.

The detector is supplied from a CR123A 3V lithium battery, which ensures approx. two years' operation.



*Fig. 1. Detector electronics board.*

## 1. INSTALLATION

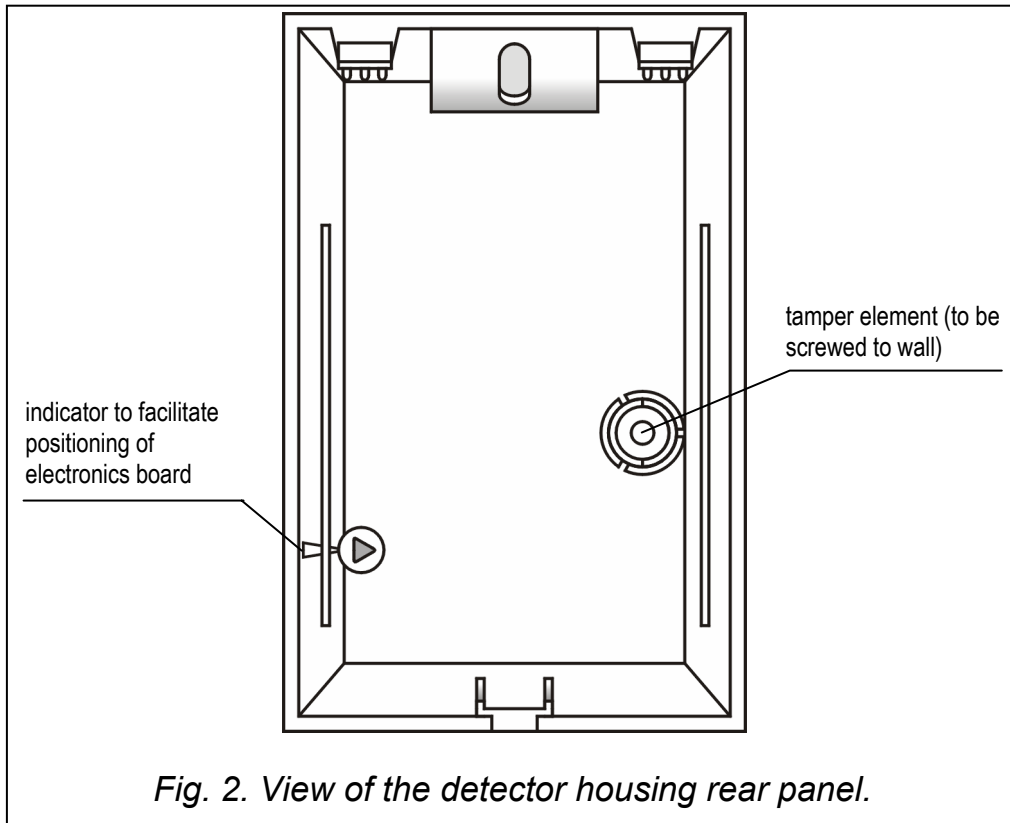


Prior to permanent mounting of the detector, you should check the level of signal received from the detector by the ACU-100 controller and, if necessary, change place of the installation so as to ensure optimal positioning in terms of communication.

The battery should be installed inside the detector just before registration of the detector in the controller. If unregistered or missing communication with the controller, the detector consumes more energy, which affects the battery life.

The detector is designed for indoor installation. It can be attached to the wall either directly or mounted on a holder included in the delivery set. As the tamper contact reacts to the pull-off, it is recommended that the device be secured directly to the wall (one of the screws should be used to fix the housing tamper element). Before the housing is mounted, remove the electronics board and make suitable screw holes in the rear panel of the housing. **Be particularly careful so as not to contaminate or damage the pyroelement during installation.**

The scale provided on the detector board (see Fig.1) is intended for properly setting the pyroelement against the lens installed in the housing. If the detector is to be installed at a height of 2.1m, set the board so that the central mark coincides with the indicator placed on the housing next to the scale. Such a setting will ensure that the manufacturer specified lens range is obtained. Otherwise, you should adjust the pyroelement setting by moving the board up (if the detector is installed higher than 2.1m) or down (if the detector is installed lower than 2.1m) as against its central position.



For information on registering and installing the detector in the wireless system please see the ACU-100 controller user manual.

## 2. LENSES

Installed in the detector is an extra-wide lens (EWA), however it can be replaced with another one, having different characteristics (range, number of beams, angle of view). Lenses are available with the following specifications:

It.	Lens type	Range	Angle of view
1	extra wide angle	15m	141.2°
2	long range with access zone monitoring	30m	main beam – 3m wide (at the end of range)
3	vertical barrier	22.5m	2.2m wide (at the end of range)

**Note:** The detector operating range should be selected to match the size of space where the detector is to be installed. The size of the space along the main direction of detector positioning is not to be less than 1/3 the nominal range of the detector. Improper selection of the lens may cause excessive sensitivity and trip false alarms.

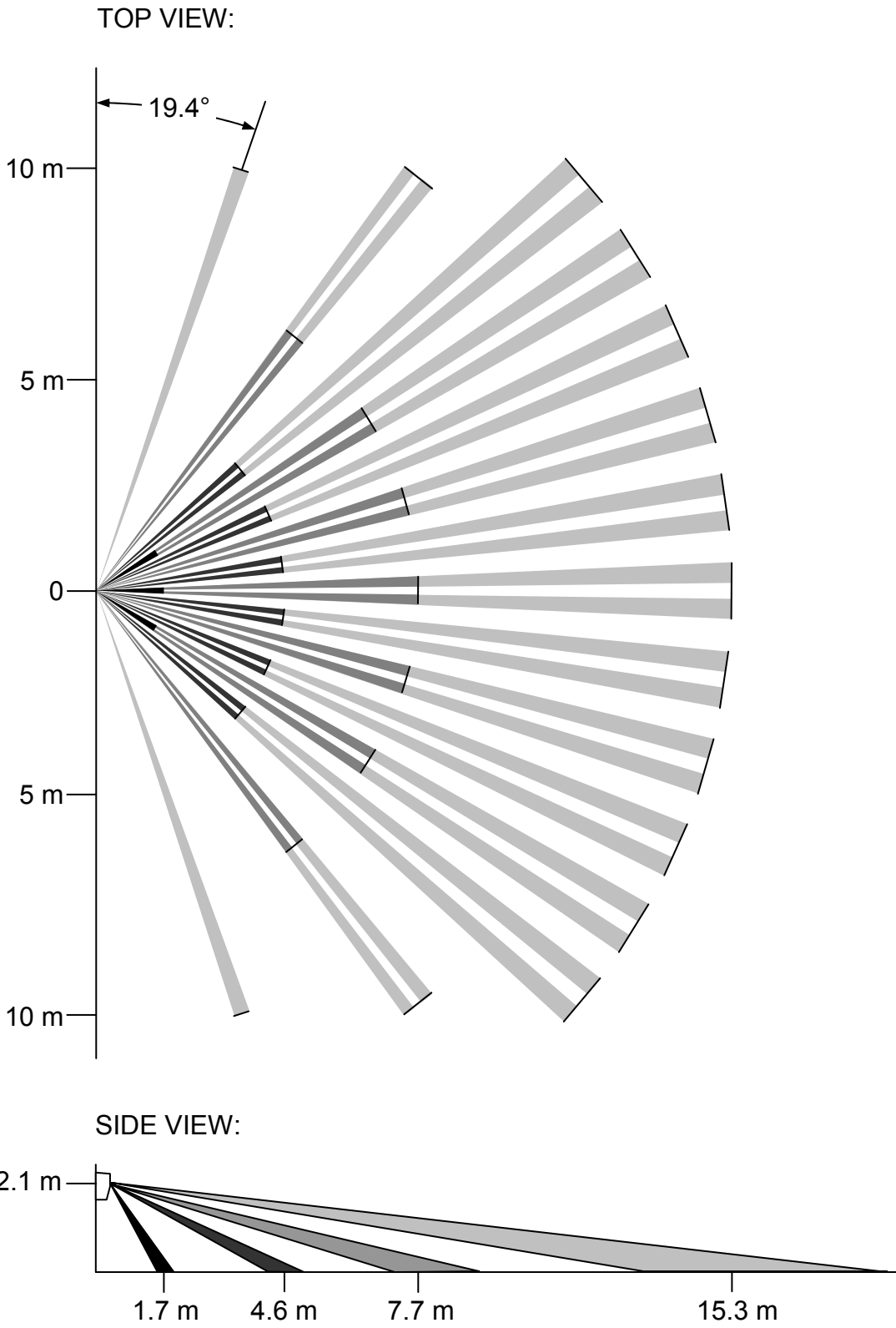


Fig. 3. Distribution of beams and operating range of detector with extra wide angle (EWA) lens.

### 3. TECHNICAL DATA

Operating band frequency .....	868.0MHz ÷ 868.6MHz
Supply .....	lithium battery CR123A, 3V
Life of detector battery .....	approx. 2 years
Operating temperature range .....	0°C...+55°C
Detectable movement speed .....	up to 3 m/s
Housing dimensions .....	63x96x49mm
Recommended height of installation .....	2.1m

#### CAUTION



Batteries in the battery-supplied wireless equipment should be replaced by qualified personnel. Incorrect replacement of the battery can pose an explosion hazard.

Always use the CR123A 3V lithium batteries.

The used batteries must not be discarded, but should be disposed of in accordance with the existing rules for environment protection.

<b>DECLARATION OF CONFORMITY</b>		<b>CE1471</b>
<b>Product:</b> APD-100 - Wireless PIR Detector for ABAX System	<b>Manufacturer:</b> SATEL spółka z o.o. ul. Schuberta 79 80-172 Gdańsk, POLAND tel. (+48 58) 320-94-00 fax. (+48 58) 320-94-01	
<b>Product description:</b> Wireless movement detector of PIR type, designed for interaction with elements of the ABAX wireless system, operating in the 868.0MHz – 868.6MHz frequency band, supplied from a 3V lithium cell. The device is intended to be used in burglary and panic alarm systems.		
<b>This product conforms to the following EU Directives:</b> R&TTE 1999/5/EC		
<b>This product meets requirements of the harmonized standards:</b> R&TTE: ETSI EN 300 220-1: v.1.3.1; ETSI EN 300 220-3: v.1.1.1; EMC: ETSI EN 301 489-1: v.1.5.1.; EN 301 489-3: v.1.4.1 Safety: EN60950-1:2001		
<b>Notified body taking part in conformity evaluation:</b> Identification No.: 1471		
Gdańsk, Poland 2005-07-15	<b>Head of Test Laboratory:</b> Michał Konarski	
The latest EC declaration of conformity and product approval certificates are available for downloading on our website <b>www.satel.pl</b>		