

The ARF-100 radio signal level tester is designed to work together with the ACU-100 wireless system controller. It is supported by the ACU-100 controller with firmware version 1.05 or later. The tester enables checking the level of radio signal received either by the controller from the tester, or by the tester from the controller. Thus it facilitates selection of a suitable installation place for the ABAX system wireless devices. The ARF-100 tester takes up one position on the list of wireless devices supported by the controller. It is power supplied from a 9V 6LR61 alkaline battery.

1. Description of the tester

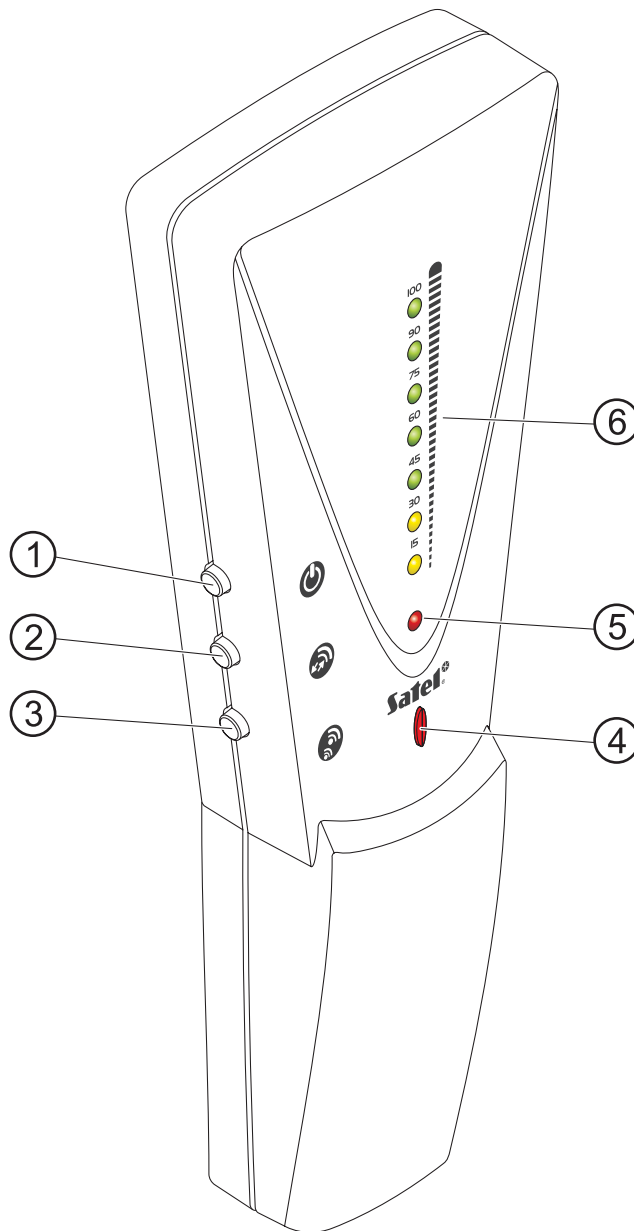








Fig. 1. View of the tester.

Explanations for Fig. 1:

- 1 – **tester ON/OFF button** (designated ). Press and hold down the button for approx. 3 seconds to switch the tester on/off. Switching the tester on is signaled by 4 short and 1 long beeps. Switching the tester off is signaled by 3 short beeps.
- 2 – **button** (designated ) **for selecting operation mode of LED indicator** After the tester is switched on, the LED indicator will show the level of signal received by the tester from the controller. It is indicated by steady red light of the LED (designated in Fig. 1 with number 5). Press the button to switch over the indicator display mode to show information on the level of signal received by the controller from the tester (the red LED will start blinking). Press the button again to toggle between the LED indicator display modes.
- 3 – **button** (designated ) **for selecting power supply mode simulated by the tester of wireless device**. The power supply mode has an impact on radio signal level of the device. When switched on, the tester simulates operation of the wireless device supplied from external power sources. By pressing the button you will switch the tester over to the mode of simulating the battery-supplied wireless device. This mode is indicated by red light of the LED designated in Fig. 1 with number 4. If the signal level indicator LEDs are on, they will go off and will only come on during the next response time, when they will show the updated radio signal level. In this mode, light of the LEDs is dimmed. Press the button again to switch the tester over to the mode of simulating the wireless device supplied from the external power source. If you hold down the button for more than 3 seconds, the tester will enter the **dense polling mode** and will stay there as long as the button is depressed. In the dense polling mode, the information on radio signal level will be refreshed every 2 seconds. At the moment of updating the radio signal level data, the tester will generate 2 short beeps.
- 4 – **red LED indicating the type of power supply simulated by the tester of wireless device:**
 - ON – wireless device supplied from battery (e.g. AMD-100, AMD-101 & APD-100 detectors, ASP-205 siren),
 - OFF – wireless devices supplied from external power sources (e.g. ACX-200 expander, ASP-105 siren, ASW-100 wireless control unit).
- 5 – **red LED showing operation mode of the LED indicator:**
 - ON – the indicator shows the level of radio signal received by the tester from the controller,
 - blinking – the indicator shows the level of radio signal received by the controller from the tester,
- 6 – **radio signal level indicator**. Consists of 7 LEDs (2 yellow and 5 green). The LEDs are described by numbers which illustrate the percentage of signal level. The indicator LEDs are blinking when the tester battery is low.

2. Description of use

In order to check the radio signal level and find the optimum installation position for the wireless device by means of the tester, follow the procedure below:


- Install battery in the tester.
- Add the tester to the wireless system (see the ACU-100 controller user manual). Each ARF-100 tester has the serial number 0000500.
- Using the  designated button, select the power supply mode for the wireless device to be installed and simulated by the tester.
- Start the test mode in the controller. During response time, the level of radio signal received by the tester from the controller will be displayed on the LED indicator. Press the  designated button to see the level of signal received by controller from the tester. The signal level is always refreshed during the response time (which is signaled by 1 short beep). If a higher update frequency is required, activate the dense polling mode by means of the  button. The signal level displayed on the LEDs will be refreshed every 2 seconds. Information update will be signaled by 2 short beeps.
- Find the optimum location to install the new wireless device.
- Having completed the test, switch off the tester and remove it from the ABAX wireless system.

Note:

- *If not used, the tester will switch off automatically after 10 minutes.*
- *Only one tester can work in the wireless system.*

3. Technical data

Working frequency band.....	868.0MHz ÷ 868.6MHz
Power supply	alkaline battery 9V 6LR61
Working temperature range.....	0°C...+55°C
Dimensions	70x196x32mm
Weight.....	137g

DECLARATION OF CONFORMITY		CE1471
Product: ARF-100 – radio signal level tester, ABAX system	Manufacturer: SATEL sp. z o.o. ul. Schuberta 79 80-172 Gdańsk, POLAND tel. (+48 58) 320-94-00 fax. (+48 58) 320-94-01	
Product description: The radio signal level tester is designed to work together with the ABAX wireless system controller within the 868.0MHz – 868.6MHz frequency band, supplied 9V 6LR61 alkaline battery. The device is intended to be used in burglary/panic alarm systems.		
The product is in conformity with the following EU Directives: R&TTE 1999/5/EC		
The product meets the requirements of harmonized standards: 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 V1.6.1; ETSI EN 301 489-3 V1.4.1 Safety: EN60950		
Notified entity participating in the conformity assessment : Identification No.: 1471		
Gdańsk, Poland 2007-01-11	Head of Test Laboratory:  Michał Konarski	
The latest EC declaration of conformity and product approval certificates are available for downloading on website www.satel.pl		

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