## STATIONARY MULTIZONE METAL DETECTOR

# RUBIKON

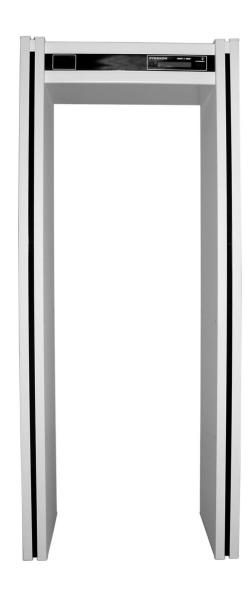


**BRIEF TECHNICAL DESCRIPTION** 

CUBE∏ **ॐ SIBEL**®

### STATIONARY MULTIZONE METAL DETECTOR





#### **APPLICATION**

RUBIKON is a stationary multizone metal detector designed to detect metal objects, including firearms, bladed weapon and metal parts of explosive devices, brought through the control zone hidden from a direct visual observation under the clothes.

RUBIKON can be used to set-up security checkpoints at locations of mass gathering (airports, railway stations, stadiums, etc.), as well as at sensitive places with the controlled access (governmental buildings, banks, corporate offices, etc.).

#### **GENERAL CHARACTERISTICS**

Once the detector is switched on, automatic diagnostics of its electronic units takes place and operating frequency with the minimal electromagnetic interference (16 frequencies within the band from 8 to 11 kHz are available) is selected.

Depending on the purpose, either of two operation modes may be chosen:

1. "Continuous" - for inspection of continuous traffic; 2. "Discrete" - for inspection of one person at a time: IR sensors turn the detector to active state and detection takes place only when a person passes through the gates.

Detection of metal objects generates the audible alarm and the position (height) of the object is visualized by LEDs.

#### **TECHNICAL CHARACTERISITICS**

Number of detection zones	12 zones (3 vertical and 4 horizontal) with independent sensitivity adjustment by 4 horizontal zones	
Sensitivity adjustment range	up to 100 levels	
Ferrous/non-ferrous metal selection	provided	
Passage through the gates speed	from 0.2 to 5.0 m/s	
Gates passageway dimensions	750* x 2100 mm	
Gates throughput capacity	up to 50 person/min	
Alarm signals	visible, audible	
Power supply	- from mains 100÷240V / 50÷60 Hz - from the built-in rechargeable battery, 12V / 7,2Ah (time of continuous operation is up to 4 hours)	
Power consumption	not more than 15W	
Operating temperature	from 0 to + 50°C (relative humidity up to 80%)	
Dimensions	2300x960x600 mm	

<sup>\*</sup> Up to 830 mm is possible on demand

#### **DESCRIPTION OF OPERATION**

The principle of operation of the RUBIKON stationary multizone metal detector is based on the change of the spatial distribution of low-frequency electromagnetic field at carrying the metal objects inside the field. Electromagnetic field is created by two coils, located in the sidewalls of the detector. Change of the field is registered by eight receiving coils, also located in the sidewalls, four on each side.

Use of the differential receiving coils provides high interference immunity of the detector to external electromagnetic interference.

Application of modern methods of digital signal processing and special algorithms allows to allocate four detection zones horizontally (according to the number of receiving coils) and three zones vertically (to the left, to the right, in the center).

Adjustment of operating modes and parameters of the detector is performed using the built-in control panel and duplicated by the remote control panel.

Unauthorized access to the control panel is blocked by a lock.

Spatial position of the detected metal objects inside the gates is indicated by lighting up of the LEDs of the corresponding zone. Location of the object within the center zone (horizontally) is indicated by simultaneous lighting up of the LEDs on both side panels.

Metal detector may be supplied with a function of transmitting the detection signal to an external personal computer.

#### **COMPLETE SET**

1	Left sidewall	1
2	Right sidewall	1
3	Control panel	1
4	Fastening elements (bolts)	12
5	Remote control panel	1
6	"Security" key	2
7	Cable for connection to 220V mains	1
8	Operating manual	1
9	Passport	1



# TECHNICAL MEANS OF COUNTERACTION AGAINST TERRORISM DEVELOPMENT AND PRODUCTION

## - Detecton of explosives

- detection of explosive vapors and traces MO-2M, MO-2D, MO-2DT, GCS-02F
- non-linear location of semi-conductor components BFD 23
- visualization of hidden components SXR-150
- metal detection
  OVERTONE, RUBIKON, MOLE
- Express detecton of drugs
  - GCS-02FN

# THE DEVICES ARE ADOPTED BY SECURITY SERVICES OF RUSSIA

### THE DEVICES ARE USED IN 50 COUNTRIES FROM 4 CONTINENTS

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