

BIRUCH

Explosive Detector

BIRUCH (C04) is intended to detect traces of explosives in gas phase during inspection of personal belongings, baggage, mail, parcels, packages, vehicles, buildings.



Opportunities and advantages

Explosives Detector BIRUCH exceeds characteristics of the best mass-produced analogue devices because of the most optimal construction, which combines high sensitivity, compact size of basic elements, and low power consumption. Device operation is based on the principle of nonlinear dependence of ion mobility on the electric field.

- direct non-contact detection of TNT vapor and less volatile explosives, including RDX and HMX;
- detection of traces of low-volatile explosives on the surface using a piezo desorber;
- explosives detection by using defining points;
- self-cleaning and automatic protection against concentration overload;
- despite the application of radio-emitting source, is absolutely safe for operator and have confirming certificates.

Technical characteristics

Parameter	Unit	Value
Sensitivity to TNT vapors, at least	g/cm ³	10 ⁻¹⁴
Analysis time, up to	sec	2
Target detectable substances	-	TNT, RDX, HMX, PENT
Signal indication of a target substance detection	-	sound, light
Distance of vortex sampling, at least	mm	60
Range of operating temperatures	°C	5 .. 50
Battery life on a single battery	hour	3,5
Dimensions, LxWxH, up to	mm	350x103x94
Weight, up to	kg	1,7

Delivery set

- Explosives detector C04 (Biruch)
- Safety cover;
- Additional battery unit;
- External power supply GS60A18-P1J or of similar characteristics;
- Power cord;
- Source of TNT vapor imitator;
- Evaporation chamber of piezo desorber;
- Removable filter grids - 3pcs;
- User manual;
- Device passport;
- Passport to the source of ionization radiation - 2 pcs;
- Packing case for storage and transportation;

The comparison of the Explosive detector BIRUCH (C04) with the rival products

Designation	Detector BB C04 (IC Biruch, CJSC, Russia)	Pilot-M1 (Lavanda-U, LLC, Russia)	MO-2M (Sibel, CJSC, Russia)	Kerber (Modus, LLC, Russia)	Sabre 5000 (Smiths Detection, USA)	Quantum Sniffer (Implant Sciences Corp., USA)
Specifications						
Threshold sensitivity, g/cm ³	10 ⁻¹⁴	10 ⁻¹³	10 ⁻¹³	10 ⁻¹⁴	10 ⁻¹²	10 ⁻¹⁴
Analysis time, sec	2	1,5	2	5	10	10
Ramp-up time, sec	6	10	10	900	900	900
Distance of sampling, mm	100	100	100	Remote sampling is absent	Remote sampling is absent	Remote sampling is absent
Battery life, h	4...6	4	3	4	4	4
Ionizer type	Radioactive source	Coronary discharge	Radioactive source	Coronary discharge	Radioactive source	Photon source
Overall dimensions, mm	350x103x94	300x180x90	310x100x90	410x162x110	363x110x130	493x127x188
Weight, kg	1,7	2	1,4	3,7	3,2	5,4

Appearance

