



YPH Group

KERBER-T

– Handheld Trace Detector for Explosives,
Narcotics and Toxic Chemicals



Main advantages:

- Rapid simultaneous detection of positive and negative ions
- Rapid switching between vapor and trace detection modes
- Non-radioactive ionization source
- Doesn't require high-priced expandable materials
- Wide range of detected chemical agents including home-made peroxide explosives
- Open database of substances with possibility of alter extension

Bipolar Ion Mobility Spectrometer Kerber-T — probably the most perfect multi-mode threat detector in the world. It can detect and identify tiny quantities of almost all kinds of explosives, most common drugs, toxic chemicals and chemical warfare agents. It's non-radioactive, absolutely safe in operation and doesn't require high-priced expandable materials. **Kerber-T** is highly appreciated and widely used by special services all over the world.

You can use our detector when inspecting people, personal belongings and luggage in the control of security at transport facilities and mass events. Also it can be used when inspecting territories, premises, vehicles and cargo during customs and border control, in forensic and environmental impact assessments.

When using **Kerber-T**, all you need is to turn on the detector and take a sample of air or traces from the surface of the subject. Full analysis is absolutely automatic and takes no more than 3-5 seconds.

“Yuzhpolymetal-Holding” Group

✉ 56 b.2, Varshavskoye sh., Moscow 117638 Russia

☎ +7 499 613-11-77, +7 499 317-31-55, +7 499 317-31-66

e-mail: analizator@list.ru

www.analizator.ru



Kerber-T Basic features

Principle of operation	Bipolar Drift-Time Ion Mobility Spectrometry
Ionization Source	Non-Radioactive — Impulse Corona Discharge
Explosives detected	Nitramines (RDX, HMX, tetryl), nitrate esters (NG, EGDN, PETN/Semtex), nitroaromatic compounds (TNT, DNT), organic peroxides (TATP, HMTD), inorganic nitrates (ammonium, potassium and sodium nitrates, ANFO) and mixtures (plastic explosives, powders, etc.)
Drugs detected	Cannabinoids (hashish/marijuana), opiates (morphine, heroin, codeine, fentanyl, etc.), amphetamines (amphetamine, methamphetamine, MDMA, etc.), cocaine and others.
Toxic industrial chemicals detected	Hydrogen sulphide, hydrogen chloride (hydrochloric acid), hydrogen fluoride (hydrofluoric acid), sulfur dioxide (sulfurous anhydride), chlorine, ammonia, nitric acid, etc.
Chemical warfare agents detected	Sarin/cyclosarin (GB/GF), soman (GD), VX/VR, mustard gas (HD), phosgene/diphosgene (CG/DP), hydrocyanic acid (AC)/cyanides.
Overall dimensions of the detector	110×170×410 mm
Weight (including battery)	3.7 kg
Threshold for detecting low-volatile organic substances based on 2,4,6-trinitrotoluene (TNT),	
- particulate matter, not more	1.0·10 ⁻¹¹ g
- vapours, not more	1.0·10 ⁻¹⁴ g/cm ³
Time for operating mode start-up, not more	15 min
Measurement time for all types of substances simultaneously, not more	5 sec
Time of changing the type of analyzed ions (negative or positive),	
- in unipolar mode (manual switching)	10 sec
- in bipolar mode (automatic cyclic polarity change)	0.2 sec
Possibility of false response, %, not more	1 %
Time of switching between vapor and trace detection modes, not more	1 sec
Switching between vapor and trace detection modes	without connection of additional devices
Time of continuous autonomy work with regular battery, not less	4 hours
Time of detector cleaning under regular operating conditions, not more	3 min
Communication interfaces	Ethernet, USB (×2), Wi-Fi (optional)