

Explosive Vapor detector EVD-M1



ITY



- Explosives reside in detection non-hermetic environment on a questioned item surface
- Detection of less volatile matters and compositions on their base (plastic explosives)
- Sample collection in a dusty and smoky environment
- Simultaneous sample collection in various places by means of remote sampler

Unfortunately, most high explosives do not have a strong vapor presence and in the real world they are very difficult to detect them by vapor. Furthermore, the vapor pressure of conventional explosives (TNT and etc...) turns on the ambient temperature to a great extent. It's essential when the examination takes place outdoors under low temperature.

Therefore, the most reliable collection and test method for those substances is a particle collection right on spot with subsequent heat treatment and IMS analysis by means of main unit under normal room conditions

Special heating unit (supplied) allows device effective low volatility explosives detection (RDX, PENT and compounds on their base, C3, C4 etc...)

Samplers & Sampler Unit

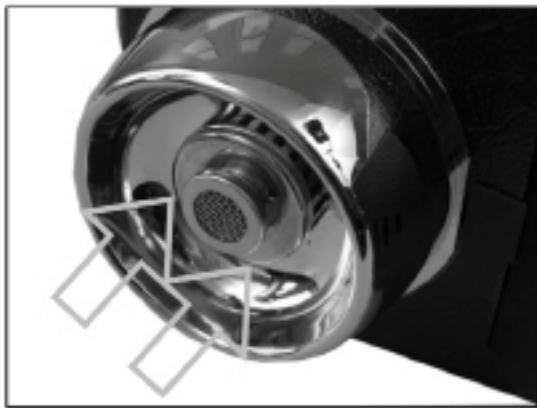
- Self contained sampler unit (air pump) with gauze sampler kit broadens the device application area
- In combination with filter paper swab samplers explosives detection is possible from a gaseous (vapor), liquid (solution) and solid (micro particles) phases
- Together with heater unit the low volatility explosives detection can be adequately solved

Options:

- Chemical snap test for explosives residual
- This detector is intended for non hermetic environment and cavities investigation for explosive scents and explosives residue detection on a questioned item surface. It might be luggage, vehicles, clothes and even passport or other document of a suspected person
- The device operational principle is based on drift spectrometry method (IMS) in an alternating electric field
- Explosives vapor detection is realized by assay collection from the suspect object surface or its inner space and subsequent analysis of these samples for the presence of typical



Detection unit



- Air-exhauster creates a tornado kind whirlwind for effective explosives vapor and residue suction from an object surface and its inner room via existing slits and cracks
- Collected data obtained by the detection unit is analyzed by built-in microprocessor and displayed on LCD.
- The sampler unit together with additional heater joint use expands the device system detection ability
- Minimization of environment influence on detection process (humidity, low and high temperature) is achieved
- Sample collection in a dusty and/or smoky environment is available (when a direct usage of the main unit is not recommended)
- Simultaneous sample collection from various places possibility with their detailed analysis in the sequel by means of detection units

Explosives substances under identification

TNT threshold sensitivity (under +20°C / {68°F}, 80% humidity)

Warm-up time

Analyses time

Indication

Power supply AC (via 21V adapter - supplied)

DC (2 rechargeable batteries - supplied)

NG, TNT, EGDN, RDX, PENT AND ETC...

NOT LESS 10g/cm²

no more 10sec.

no more 1sec.

audio & LCD

100...240V / 47...63HZ

6V

Technical specifications

One battery pack continuous operation time

Temperature

Relative humidity Survive after strong environment effect

Temperature

Relative humidity main unit

Dimensions

Weight (with battery)

Total weight with carrying case, batteries and accessories

not less 4 h

+5°C...+40°C

up to 90% (under +25°C / {77°F})

-5°C...+50°C

80% (under +25°C / {77°F})

300 x 180 x 90 mm

1.715 kgs

7.350 kgs

