

# MO-2M

## HANDHELD EXPLOSIVE VAPOR DETECTOR



### APPLICATIONS

The **MO 2M** is lightweight (1.45kg), highly sensitive Hand Held Explosive Vapor detector designed for a **contact-less, non-intrusive inspection** of :

- Persons and Hand luggage,
- Luggage and cargo transported by all means,
- Letters and parcels,
- Buildings, offices, furniture,
- Vehicles, ...

When fitted with its **TVIN thermal desorber**, MO-2M can detect explosives residues collected on paper swipes or air samples collected on a metallic trap

### OPERATING PRINCIPLE

**MO-2M** collects air samples from inspected objects, either directly or after vaporization explosives traces in TVIN. Vapors are then ionized and separated using the Non Linear Dependence of Ion Mobility (NLDM), also called FAIMS

### PERFORMANCE

#### Explosives detected:

TNT, NG, PETN, RDX, TATP, etc...and ICAO Taggants (EGDN MNT) and others with similar physicochemical properties, as well as their by-products and/or mixtures such as C4, Semtex, Dynamite, ....

**Sensitivity** : in **vapor mode** :  $10^{-13}$  g/cm<sup>3</sup> (10 ppt) for TNT  
                   in **particle mode** : 50 pg.

**Calibration time** : less than 10 seconds

**Response time** : 2 seconds

**ADVANTAGES**

- Fully automatic, real time hand held detector,
- Ready to operate in less than 10 seconds after automatic calibration,
- Constant adjustment of operating conditions in line with the changes in the atmosphere,
- User friendly software, to display, analyze and record detailed detection data
- No gas carrier required, no filters, no consumables
- No special training required.
- **Now:**
  - Internal battery for easier handling
  - Internal memory allowing the storage of 4000 ionograms (measurements)
  - Embedded Bluetooth for connection to a PC or PDA
  - Large color LCD display (38 mm x 29 mm)

**MAIN FEATURES**

**SIZE**

- Portable unit dimensions
- Portable unit weight
- Weight of the complete set in its transportation case
- Case dimensions

300 x 82 x 110mm  
 1.45 kg  
 8.00 kg  
 465 x 335 x 135mm

**POWER SUPPLY**

Rechargeable Li-Ion 14.4V. battery, or mains (90/240 V - 50/60 Hz)

Operating time: 4 hours per battery in vapor mode

1 hour per battery in trace detection mode

The complete set includes: 3 batteries 1 battery charger, 1 AC adapter.



**OPERATING CONDITIONS**

Temperature (Vapor detection mode)	+ 10 to + 45 °C
Temperature (Traces detection mode, using the TVIN)	- 10 to + 45 °C
Storage temperature	- 30 to + 50 °C