## ındra



# **CBRNe Laboratories**

Complete solutions for defence and protection from CBRNe threats. Our laboratories are available in different configurations depending on the requirements in terms of mobility and deployment time.

Indra Laboratories are suitable for onsite and remote analysis of chemical, nuclear-radiological and biological compounds, ensuring that CBRNe threats can be rapidly and accurately identified and dealt with. They allow operators to analyze and identify toxic and dangerous substances in the field, and can be used in military conflict as well as in the event of a terrorist attack or industrial incident.

#### **Constructive Configurations**

Depending on the concept of use established by the users and the requirements in terms of mobility, several configurations are available:

- Mobile configuration. This configuration can be based both on board of a shelterized solution or a commercial Van/Truck. This solution is suitable for applications demanding an immediate response along widely changing sites. With this configuration a confirmed identification level could be reached.
- Modular configuration. This solution is pivoting on a semi-stationary approach.

The modular configuration is composed of several fielded containers linked to each other through tunnel tents. This configuration has been devised to achieve a truly fast complete deployment on site allowing to reach an unambiguous identification level.

• Stationary configuration. This configuration is based on a stationary (fixed) facility fitted with a wider range of analytical equipment to allow an unambiguous identification level. This configuration is the most appropriate to set up national reference R&T Centers.

The equipment listed enables the identification of volatile and non-volatile toxic and dangerous chemicals, including mid-spectrum chemicals from environmental samples, radiological materials, and biological agents, always accordance with international regulations

### **MOBILE CBRNe Laboratories**

The mobile CBRNe laboratory consists of the following key elements:

- 20" ISO standard container with optional ballistic protection.
- Compliant with STANAG 4632, AEP-10 and AEP-49.
- Able to operate from -32°C up to +55°C.
- CBRNe filtration system.
- Isolator with SAS door for samples entrance and manipulation.
- Autonomous generator working.
  Up to 72 h. autonomy.
- UPS system.
- Water supply system.
- Decontamination for laboratory material and personnel.
- CBRNe analytica equipment.
- Data handling, local communication devices, and security systems.
- Certified Laboratory as a whole system.
- Able to work in movement.
- 2-3 operators workspace.
- Enough consumables, reagents and tools for working continuously up to 72h.

#### **MODULAR CBRNe Laboratories**

- Housing based on ISO 20 feet containers (sea/ air/terrestrial freight).
- Built-in CBRNe air filtration to guarantee a clean and safe working environment and prevent any leaks to or from the surrounding environment.
- Integrated HVAC cooling / heating.
- Integrated power conversion system (UK/USA/EU) and Back-up power supply (UPS).
- Water handling systems:
- Clean water (cool/ hot).
- Waste water management system (Hazardous, Grey & Black).
- Analytical instruments and sampling tools (Latest state of the art for Biological, Chemical and Radiological devices).
- Personnel safety means (EPIs, etc.).
- Incorporates an Integral Security System (Control access, Firing System).
- Specific area for preserving & storage samples (tempered, vented, etc.).
- Includes an administrative office space and sanitation facility.
- Integral Data Management throughout the lab by the Lab Information Management System (LICU®).
- Full IT network connectivity (Int. LAN/ Ext. Secure WANs).

### Working areas

- Triage.
- Chemical Area.
- Biological Area.
- Radiological Area.
- SEA Secure Storage Area.
- Command Area.
  - Working posts connected to LANs.
- Platform management & Control.
  - LICU® management module.
  - Fire fighting control application.
  - Security control application.
  - Power conversion & backup.
  - Secure/ Non-secure IT Network (LAN).



### **STATIONARY CBRNe Laboratories**

The different analytical equipments specified in these laboratories will be selected following the customer's requirements.

Our Stationary CBRNe laboratories include the general common systems for this type of laboratories as well as the following specific key elements:

- Several anterooms (separate restricted traffic flow).
- Self closing and inter-locking logic for rooms
- Class II or III (with SAS door) Biosafety Cabinet (BSC).
- Multiple cascade differential pressure between rooms.

- Supply and exhaust air is HEPA filtered.
- Organic Self-decontamination system by Hydrogen peroxide.
- Contaminated materials are decontaminated by SAS and/or double door autoclave.
- Thermal-chemical decontamination of effluents prior final discharge.
- Fulfillment of the most restrictive regulations (OMS Directive & Canadian normative for Biosafety Lab guidelines).
- Long term power autonomy (Power generators and back up UPS system).
- Secure and Non-Secure IT network (LAN).
- Massive storage evidence Area.

This type of laboratory is Certified as a whole system (facility, equipment and personnel).





