

# SAUNA TXL

An autonomous and tactical SAUNA solution



## Key Features

- Highly transportable and tactical solution
- No infrastructure needed to support installation
- An autonomous state-of-the-art radionuclide continuous monitoring system installed in 20' container
- Equip it with your choice of SAUNA system
- Supports most countries' electrical power standards
- Diesel power generator for many days of operation without external power or refueling
- Redundant climate control units guarantees operation in severe conditions
- Remote operation and diagnosis
- Data continuously transferred to user

## SAUNA

SAUNA (Swedish Automatic Unit for Noble Gas Acquisition) is a fully automatic system for detection of radioactive xenon gas in the ambient atmosphere. The SAUNA system performs uninterrupted sampling, processing, quantification, and activity measurement of the four xenon isotopes  $^{133}\text{Xe}$ ,  $^{135}\text{Xe}$ ,  $^{133m}\text{Xe}$ , and  $^{131m}\text{Xe}$ . The SAUNA system comprises a sampling system, processing system, quantification system, detector transfer system, detection system, UPS system and a State of Health system for system supervision. The instrument has a modular design and everything except the detection system is installed in 19" racks.

## Future proof

The close strategic cooperation with Swedish Defence Research Agency (FOI), who has world-leading expertise in the field of radio-xenon detection and analysis, vouch for continuously improvements of the SAUNA systems, which will give the user better performance and data availability. This will maintain our position as the No. 1 supplier of radio-nuclide monitoring equipment.



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### Wherever and whenever you need us

Our experienced service engineers maintain and support all installations globally at least once per year. Thanks to that we can sustain our excellent operational track record and historically highest system uptime; some customers e.g. have 99% uptime. We offer a variety of service contract levels to meet our customers' demands for world-class services.

### Specification

The SAUNA TXL solution has been developed in cooperation with Pacific Northwest National Laboratory (PNNL) and comes with isolated walls and ceilings for better temperature control. It is also equipped with lightning in the ceiling and furniture, such as desk, chair, and storage cabinet. Miscellaneous items such as tools, straps, springs/bumpers for chock protection, etc. are also included.



| Parameters                            | TXL                |
|---------------------------------------|--------------------|
| Container size during transport       | 20'                |
| Porch extension in operation          | Yes                |
| Reinforced floor, walls, and ceilings | Yes                |
| Climate control – AC units            | 2                  |
| Air inlet and outlet                  | Yes                |
| External power input                  | 3-phase or 1-phase |
| Diesel Power Generator (kW)           | 12                 |
| Fuel consumption (l/hr)               | 2.7 – 4.5          |
| Fuel tank (l)                         | 378                |
| Starting temp. of generator           | -29°C to +49°C     |
| ToxGard II oxygen monitor             | Yes                |
| Weight (kg)                           | <7000              |

### About us

Scientia Sensor Systems markets, installs, and services ultrasensitive systems for detection of radioactive xenon in the atmosphere, e.g. for detection of nuclear explosions or malfunctioning nuclear plants. The company has the biggest installation base of radio-nuclide systems that have been installed in monitoring stations and networks worldwide. Scientia Sensor Systems is engaged in a long term strategic partnership with the Swedish Defense Research Agency (FOI) in the development of technologies for the next generation of systems.

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