

## Large Article Monitor (LAM) / Box Counter

# **BOX COUNTER**

## MAIN FEATURES

- Larger internal volume than traditional Large Article Monitors (LAM)
- Fast and accurate contamination measurements
- Fully accessible measurement chamber
- · Movable system for easy relocation
- · Detectors: up to 6 large plastic scintillators
- Nal(TI) detector with MCA for NORM detectability (only 6U NORM version); Isotope ID (Optional)
- Easy decontamination of internal and external surfaces
- Measuring chamber 28"x28"x33"
- Ethernet connection available for data exporting



#### DESCRIPTION

The **BOX COUNTER** system is designed to perform a fast gamma contamination check of laundry, waste bags, tools and other small objects. Measurement results, alarms and malfunctions are displayed by the control console as well as the alarm unit.

The **BOX COUNTER** system can be easily moved and relocated by the user thanks to 4 pivoting and lockable wheels. The mechanical structure is made of stainless steel, all internal and external surfaces are specifically designed to be easily cleaned and decontaminated.

The 28"x28"x33". measuring chamber is accessible through 4 side doors. Up to six detectors can be installed, 4 in the doors, 1 in the top and 1 in the bottom side.

The detectors are large plastic scintillators, shielded with 0.4 inch lead sheets, in order to minimize the environmental radiation background. The system can reach an MDA as low as 0.11  $\mu$ Ci (Cs-137) in 10 seconds.

The available versions are:

- 2U two plastic detectors each installed in a side door
- 4U four plastic detectors each installed in a side door
- **6U** six plastic detectors, four of which installed in the side doors, and two in the top and bottom of the measuring chamber
- **6U NORM** five plastic detectors in the side doors and in the bottom of the measurement chamber, and a 2"x2" Nal(TI) detector with MCA in the top of the measurement chamber

The control console consists of a touch-screen PC installed on the top of the system, equipped with an ELSE NUCLEAR management software.

The software allows the user to:

- activate the measurements, analyze, display and save the measurement data
- · set the operational parameters such as alarm thresholds, detector enabling and calibration factors
- activate, mute and reset the alarm and malfunction statuses through relay switches
- · perform a quality check to verify the proper functioning of the system





## **TECHNICAL SPECIFICATIONS**

Measurement features

- Energy range:
  - Environmental conditions:

**Detectors** 

- Type:
- Number of units:
- Surface:
- . Thickness:
- Shielding:

<u>Housing</u>

- Maximum dimensions:
- Measurement chamber dimensions:
- Side doors dimensions:
- . Material:
- Protection:
- Handling:

Counting and signaling electronics

- Signals acquisition:
- Status management:

Control console

- Panel PC:
- Display:

35 keV ÷ 2 MeV -4 to 122 °F, relative humidity < 80%

plastic scintillators (20"x 20" x 2") up to 6 387 sq in. 2 inches Lead 0.4 inches

42"x55"x38" 28"x28"x33" 28"x33" Stainless steel IP55 4 pivoting and lockable wheels

From 2 to 6 input counters 4 relays NO/NC

Industrial touch-screen LCD TFT 8.4"

- OPTIONS
- 2U, 4U and 6U versions available
- 6U NORM version: including a 2"x2" Nal(TI) detector with MCA for NORM detectability
- · Isotopic ID capability available as add-on option

### ACCESSORIES AVAILABLE UPON REQUEST

- 1. Scale embedded in the lower side of the measurement chamber (2U and 4U versions)
- 2. Extended warranty from 12 months to 24 months





Software main panel



RT Technologies, Inc. | www.rtlasersafety.com 770-332-0092 | contact@rtlasersafety.com