

## CONTAMINATION MONITOR FOR TOOLS AND SURFACES

# ARCHIMEDES II WiFi

### MAIN FEATURES

- **Fast measurement of the gamma activity**
- **One-of-a-kind device for big surfaces scanning**
- **Removable detection units**
- Detectors: 2 large plastic scintillators
- Bags up to 150 Kg
- Removable detectors for use in remote mode
- MDA (Co-60): down to 200 Bq (10 min)



### DESCRIPTION

The **ARCHIMEDES II WiFi** is designed to perform fast measurements of the gamma activity of bags, potentially containing contaminated materials.

Its structure is mounted on wheels, hence it is easy to handle and move.

The system is composed of an anti-vibration base structure with a control console, and two vertical detection units facing the measurement area where the bags are loaded.

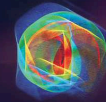
The material-detectors distance can be adjusted to maximize the counting efficiency.

The detectors are fully removable from the support base, allowing remote-mode measurements when needed; the acquired data are sent to the control console through a WiFi connection, to perform data processing.

When the detectors are used in remote mode, the power supply is provided by rechargeable batteries installed in each detection unit. When the detectors are connected to the support base the batteries are recharged and the power supply is provided by the mains.

The system **ARCHIMEDES II WiFi** calculates the gamma activity of the material being monitored and compares it with the operative clearance limits; then it issues an acoustic and visual signal (thanks to the integrated beacon) to confirm the good functioning and the measurement result.

The software allows the setting of the operative parameters, as well as the analysis and the archiving of the data coming from the electronics associated with the detectors.



## TECHNICAL CHARACTERISTICS

### Detection unit

- 2 large plastic scintillators
- Energy range: 35 keV ÷ 2 MeV
- Removable detectors powered by batteries
- Detector dimensions: 50x50x5 cm
- Lead shield thickness: 1 cm on the external sides
- Distance between the detectors mounted on the structure's base: selectable from 2 up to 50 cm

### Acquisition unit

- Low noise power supply and signal processing electronics
- Threshold discriminators for each detection unit
- WiFi Ethernet Interface to PC

### Host PC

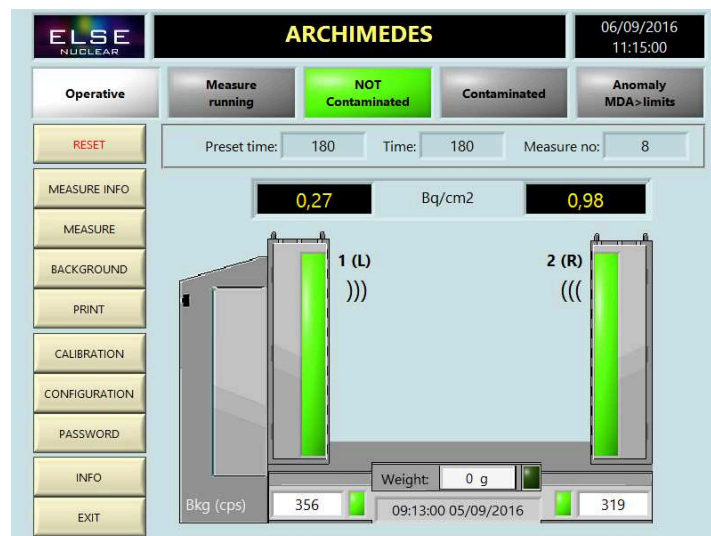
- Industrial panel PC, LCD touch-screen display
- Display: LCD TFT 8.4"

### Processing software

- Analysis and data archiving software for the management of the measurement system
- Activity results given in Bq, Bq/cm<sup>2</sup> or Bq/g

### Weight and dimensions:

- Max dimensions (excluding alarm column): 160x95x110 cm (WxLxH); Total weight: 350 kg



*Software main panel*

## OPTIONS

- **ARCHIMEDES II Lite:** version with no WiFi communication and non-removable detectors

## ACCESSORIES AVAILABLE UPON REQUEST

1. Scale
2. Label printers
3. Barcode reader for materials identification
4. Warranty extension from 12 months to 24 months