

# **ARCHIMEDES II WiFi**

# CONTAMINATION MONITOR FOR TOOLS AND SURFACES







Detectors: 2 large plastic scintillators

150 Kg maximum payload

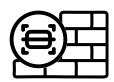
Easy decontamination of internal and external surfaces

Removable detectors for use in remote mode

MDA (Co-60): 200 Bq (10 min)



Fast measurement of gamma activity



One-of-a-kind device for big surfaces scanning

The **ARCHIMEDES II WiFi** is designed to perform fast measurements of the gamma activity of bags, containing potentially contaminated materials. The mechanical structure is mounted on wheels to be easily handled, and a set of adjustable supports allow to stabilise the monitor.

ARCHIMEDES II WiFi is composed of an anti-vibration base structure, a digital scale, a control console, and two vertical detection units defining a measurement area. The detectors can slide along the base and be manually positioned as near to the bag as possible, to maximize the counting efficiency. The detectors are fully removable from the support base, allowing remote measurements when needed; the acquired data are sent to the data processing control console through a WiFi connection.

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.

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 through the integrated alarm column to confirm the good functioning and the measurement result.

The system software allows to set the operative parameters and to manage the analysis and the archiving of the data coming from the electronics associated with the detectors.

#### **TECHNICAL SPECIFICATIONS**

#### **Detection unit**

- 2 large plastic scintillators
- Energy range: 35 keV ÷ 2 MeV
- Removable detectors powered by batteries
- Detector dimensions: 50 x 50 x 5 cm
- Lead shield thickness: 1 cm on the external sides
- Distance between the detectors mounted on the frame: adjustable 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**

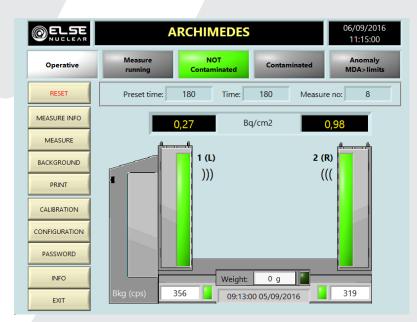
- Industrial panel PC, LCD touch-screen display
- Display: LCD TFT 8.4"

## Weight and dimensions

- Max dimensions (excluding alarm column): 160 x 95 x 110 cm (WxLxH)
- Total weight: 350 kg

### Processing software

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



ARCHIMEDES II WiFi software interface

# **ACCESSORIES AVAILABLE UPON REQUEST**

- · Label printers
- · Barcode reader for materials identification
- Warranty extension from 12 months to 24 months

