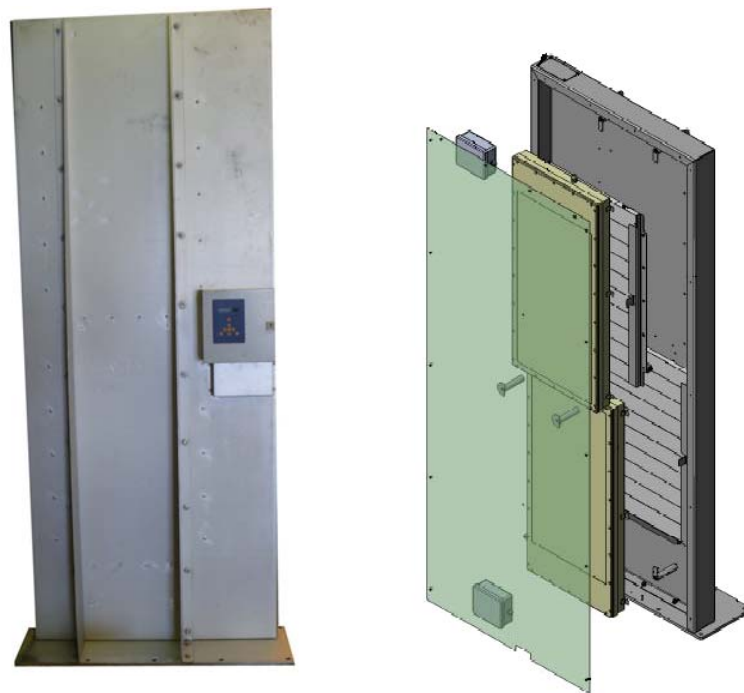


- Ideal for the detection of radioactive contamination of laundry (after washing) in the nuclear industry
- Gamma detection
- Fully automatic measurement
- High sensitivity
- No gas technology
- Double alarm threshold
- All-in-one system



## CORALI-V

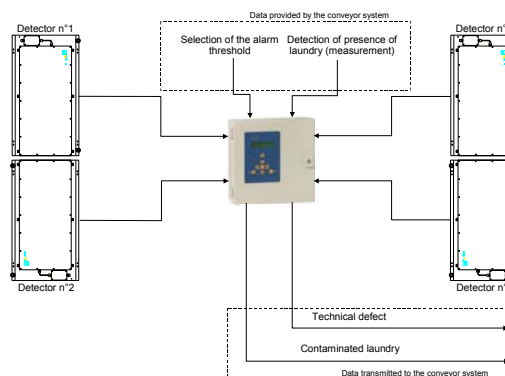
### Vertical Laundry Monitor

**CORALI-V monitor is especially designed for the detection of radioactive contamination on laundry items.**

The monitor is based on an electronic processing unit like **ANDREA** linked to four **DSP 010 – 400** plastic scintillation detectors.

Measurement is done by four detectors fixed on a metal structure on both sides of the laundry to be controlled. The detectors are protected by a 2.5cm thick lead shielding. The aerial conveyor is optional.

When the presence of laundry is detected, the ANDREA unit, fixed at the back of one of the metal structures, stops the background measurement and calculates the alarm thresholds.



## Physical characteristics

- Measurement done by 4 plastic scintillation detectors (25 liters)
- Minimum Detectable Activity for Cesium-137 under the following conditions:
  - False Alarm Rate: < 0.15%
  - Detection probability: > 97.5%
  - Measurement time: 2 seconds (corresponds to a speed of 25 cm/s)

Background value	70 nGy/h	150 nGy/h	300 nGy/h
MDA	800 Bq	1170 Bq	1660 Bq

## Environmental characteristics

- Operating temperature: -10°C to + 40°C
- Storing temperature: -20°C to + 60°C
- IP index: IP56

## Mechanical characteristics

- Dimensions (H x W x D): 2.8m x 1.1m x 1.3m
- Load distribution plate
- Stainless steel structure
- Weight: approximately 1.5 tons

## Electrical characteristics

### ANDREA processing unit

- Power supply: from 100 to 240 VAC – single-phase 50/60 Hz,
- Protection: SFT circuit breaker with a 2A 8.5 x 23 mm fuse,
- Internal power supply (VCC=24V): 2A for the secondary power source,
- Lithium battery: CR2032 3V for saving clock settings.
- Standards
  - European directives: 2004/108/EC and 2006/95/EC - EMC immunity
    - IEC 61000-4-2
    - IEC 61000-4-3
    - IEC 61000-4-4
    - IEC 61000-4-5
    - IEC 61000-4-6
    - IEC 61000-4-11
  - Security
    - EN61010-1
  - EMC emission
    - CISPR 11 (Class A)
    - IEC 61000-3-2
    - IEC 61000-3-3

## Interfaces

### ANDREA processing unit

- Electrical connections
  - Connection of detectors and peripheral devices on screw terminal blocks located on the lower side of the kit.
  - Metal cable gland for cable input
- Data link:
  - 1 supervisor link: RS485
  - 2 links for peripheral devices: RS232/RS422/485
- 5 relay outputs SPDT
- 5 digital inputs
- Specific alarm output

### Presence detection

- A presence detector is essential for the successful operation of the device (option)
- The contacts used are normally closed contacts, i.e. the electric contact opens when laundry is detected.

## Options

- Presence detector
- Aerial conveyor
- Alarm report box

[www.saphymo.com](http://www.saphymo.com)