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## LCM-300

# LAUDRY CONTAMINATION MONITOR



### MAIN ADVANTAGES

- Rapid measurement of laundered items from both sides simultaneously
- Automatic conveyor with belts on both top and bottom sides keeps laundry in optimum position for measurement and prevents fouling in mechanism
- Discrimination of alpha / beta / gamma radiation
- Easy control and maintenance
- Automatic background compensation
- High sensitivity thanks to the tight geometry between belts
- No gas flow detectors used

### PURPOSE

The LCM-300 series Laundry Contamination Monitors are primarily used for checking contamination of washed, dried, and laid-out laundry originating from areas where it could have been in contact with alpha, beta and/or gamma radionuclides. They can also be used for checking contamination of other similar items of suitable size and shape.

Various models of the LCM-300 Laundry Contamination Monitors are available. The basic model LCM-300BG is primarily designed for checking beta and gamma contamination in two measurement channels. The detectors are also sensitive to alpha radiation (without discrimination). Other LCM-300 models are designed for checking alpha contamination (with discrimination) or for checking gamma contamination only.

The basic type LCM-300BG monitor consists of two conveyors placed one above the other. The bottom conveyor usually contains four gamma radiation detectors.

The top conveyor usually contains eight beta (and alpha) radiation detectors.

To maintain alpha/beta efficiency and maintain tight geometry, the upper conveyor belt is perforated and adjustable in height.

Measurement is carried out in continual or incremental mode, and displayed on the control panel. When the pre-set alarm levels are exceeded, the conveyors stop and the visual and acoustic alarms operate. The operator chooses whether to return the contaminated laundry to the entrance or to continue to the exit.

### SPECIFICATION

Detector type	plastic scintillator
Detector active area	
bottom conveyor	661 cm <sup>2</sup>
upper conveyor	525 cm <sup>2</sup>
Number of detectors	
bottom conveyor	4
upper conveyor	8
Dimensions (W × H × D)	1275 × 1640 × 3510 mm
Weight	1150 kg
Power supply	230 VAC, 50 Hz
Operational temperature	from 0 to +50 °C
Operational humidity	max. 98 % noncond.
Displayed units	cps, Bq, Bq/cm <sup>2</sup>

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## TYPES

Name	Upper conveyor	Bottom conveyor
LCM-300AG	alpha	gamma
LCM-300BG	alpha + beta	gamma
LCM-300CG	alpha/beta	gamma

## RELATED PRODUCTS

PAM-100	Portable Activity Meter
PAM-170	Portable Activity Meter
PAM-525	Portable Activity Meter
FCM-11	Frisking Contamination Monitor
SFP-100	Smart Frisking Probes

## TYPICAL RADIOMETRIC PARAMETERS

Channel	Radionuclide	Detection limit [Bq/cm <sup>2</sup> ]
beta	<sup>137</sup> Cs	0,2
gamma	<sup>137</sup> Cs	1,2

## OPTIONAL ACCESSORIES

1-0216-00046	Cable RS-232
53-A-0000006	Service SW, VF-Setup



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Specification subject to change without prior written notice.

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