

## SPECIFICATION SHEET

# EL 25

FOODSTUFF COUNTER WITH  
HIGH-SENSITIVE NAI DETECTOR


During nuclear accidents, e.g. in Fukushima and Chernobyl, large quantities of radioactive material can be released into the environment and spread over large areas. Long half-lives (e.g. Cs-137: >30 years) and complex decay chains mean that contamination can end up in food and drink, from fish to mushrooms and drinking water. In these cases, you may need to do checks with a high-sensitive detection system. The EL-25 foodstuff counter has been developed for this purpose. The EL 25 with its integrated, pre-calibrated NaI detector, is a reliable and affordable solution to ensure that food is free from radioactive contamination.

## Benefits

- Small, economic measurement system
- Shielded NaI detector
- Shielded sample container
- Easy to use
- Small size enabling easy relocation
- Widely used after the Fukushima incident

## Key Figures

<35 Bq/l  
→ Detection threshold

400 ml  
→ Beaker volume

10h  
→ Battery operation

## Product Description

Radioactive pollution in the environment after a nuclear accident affects the eco-system, the wildlife, the farming economy and can lead to radioactive contamination of food. The EL 25 Foodstuff Counter is an easy-to-use, sensitive and competitively priced system to ensure that measured food is free from contamination. Two easy-to-fill 400 ml plastic beakers are provided for both solid and liquid foods. For the measurement, the beaker is placed inside shielding and on top of a sensitive shielded NaI scintillation detector. The microprocessor-based unit clearly displays the measured radioactivity and gives an optical and an acoustic output, if the user-defined alarm thresholds are reached. The EL 25 Foodstuff Counter has proven and established itself in daily use in Japan following the Fukushima incident.

## Performance Characteristics

- Suitable for solid and liquid foods and other products
- User-defined alarm thresholds: optical and acoustic alarm
- Calibrated with certified Cs-137 and I-131 sources – other calibrations possible
- Measurement time: fixed or automatic calculation based on required LoD
- Automatic background correction
- Measurement display in cps, Bq, Bq/l, Bq/kg
- Successful and wide-spread use in Japan after the incident in Fukushima
- Different detector shielding possible for weight optimization (steel, lead)
- Sample container shielded separately (13 mm lead) for reduced background
- Optional printout of measuring results on label

## Product Specifications

<b>Analysis and display</b>	Microprocessor-controlled electronics - Data export possible
<b>Weight</b>	7.5 kg (steel shielding), 11.6 kg (lead shielding)
<b>Dimensions</b>	175 x 200 x 80 mm (L x W x H)
<b>Sample</b>	Shielded 400ml plastic beaker
<b>Detection threshold</b>	< 35 Bq/l (lead shielding), <50 Bq/l (steel shielding) - 400 ml, 999 s measuring time
<b>Power supply</b>	230 V for static use and battery charging and mobile use via battery
<b>Operating temperature</b>	0 °C – 40 °C
<b>Optional equipment</b>	Label printer, scales, test sources

