

DSP 010

γ large surface detector

- **DSP 010** is a large Gamma plastic scintillation detector. Connected to a CTM 304 or ANDREA processing unit it allows detection of very low active sources on staff, trains or trucks entering or leaving a nuclear or industrial site. It can also be used to control boarder crossing points, waste disposals, incinerators ...

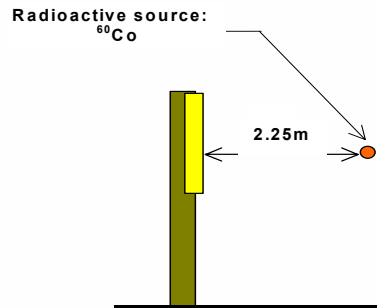
➤ Technical characteristics



Minimum Detectable Activity:

In static position, for a control carried out in the following conditions:

- background : 70 nGy/h
- measuring time $t = 1$ s
- false alarm rate = 0.15%
- detection probability = 97.5%



allows detection of 50 kBq of ^{60}Co equivalent.

In practice:

- vehicle speed ≤ 10 km/h
- a 11.1 MBq (300 μCi) ± 20 % radioactive source of ^{137}Cs equivalent in the centre of a scrap load (density 0.8 g/cm³) is detected

Detector: plastic scintillation detector 1000 x 500 x 50 mm (25 litres) with low noise photomultiplier

Energy range: from 50 keV to 2 MeV

Presence sensors: infrared cells CIR 305/DSP 010 or inductive magnetic loop BDM 303

Housing: aluminium

Watertightness: IP 56

Weight:

- 300 kg (with lead shielding)
- 70 kg (without lead shielding but with a lead frame support)

Dimensions: 1310 x 730 x 155 mm

Working temperature: -20 °C to +50 °C (larger range available as an option)

Option: lead shielding 2.5 cm thick