



MNT
KWINT INTERNATIONAL B.V.



MEDICAL NUCLEAR TECHNOLOGY

Hand-Foot -Clothing Monitor

with large-area, thin-layer plastic scintillation.



Monitor to check personnel
before leaving a radiation controlled
area.

Characteristics

- modern detector technology based on thin-layer plastic scintillation detectors
 - no gas-filled detectors - therefore considerable reduction of operating costs
 - no gas supply required
- suitable for α and β/γ - contamination measurement
- electronics based on industrial grade PC
- operator-friendly user interface, large-area colour-LCD display for indication of measurement values
- nuclide selection menu, user-related nuclide pre-selection possible
- hand probe detachable - therefore no additional frisker probe required
- integrated calibration software for quality check
- ergonomic housing design
- network-compatible
- link of HFC-monitors to central database with parameter setting features

Technical Data

Detector type: large-area, thin-layer plastic scintillation detectors (PSD)
with ZnS-coating for a and b/g measurements
with integrated photomultiplier and detector electronics
For typical sensitivities see chart.

Measuring channels:

- hands 2 PS-detectors (as desired also with 4 hand detectors)
1 detector per hand, Start of measurement through light barriers
- feet 2 PS-detectors, 1 detector per foot
- body right hand detector detachable for body measurement

Background

- subtraction: with adjustable BG-measuring time, σ -threshold for new BG-measurement
Measuring

System.

- electronics: integrated industrial grade computer based on PC 104
- Keyboard: foil keyboard
- Alarm: separately adjustable for each detector

Measuring value

- display: selectable in cps or nuclide-related in Bq or Bq/cm²
- Measuring time: adjustable in s
- Display: large-area, graphic colour LCD display 10.4"
- Power requirement: 110 - 240 V, 50 - 60 Hz, 60 VA
- Dimensions: approx. 1160 mm x 830 mm x 700 mm (h x w x d)
- Weight: approx. 45 kg
- Housing: ergonomically shaped plastic/stainless steel housing
- Interfaces: - serial interface RS 232
 - parallel printer interface
 - external keyboard
 - floppy disk drive 3.5"
 - network connection (option)
 - relay output for alarms

Transponder system for automatic identification of personnel, containing identification system and software expansion and transponder chip (option).



Fig. 1: Detector display
count rates of all detectors
for function check



Fig. 2: Large-area, thin-layer
plastic scintillation detector



Fig. 3: Transponder for
person related measurement