

# HFC SCAN

Hand Foot Contamination Monitor



**BERTHOLD**

# HAND FOOT CONTAMINATION MONITOR

## Performance and Design for any Environment

The Hand-Foot-Clothing Monitor provides reliable and precise contamination monitoring for professional use in radiation protection. It detects alpha as well as beta and gamma radiation, thereby ensuring maximum safety for personnel and the surrounding environment.

When stepping onto the footplate, the monitor turns on automatically and performs a fast and efficient measurement of your hands and the soles of your feet. The intuitive interface features a modern touch panel with a clearly structured graphical display, ensuring a comfortable and user-friendly experience.

Highly sensitive, low-maintenance thin-film scintillators based on ZnS(Ag) ensure precise measurement results. The rugged, powder-coated housing is designed for demanding applications, is easy to decontaminate, and can be moved flexibly and effortlessly thanks to integrated transport casters.



Optional with signal tower

### Highlights and functions

- One detector type for all: hands, feet and clothing
- Highly robust device with transport wheels
- Precise performance and rugged design for any environment
- Suitable for  $\alpha$  and  $\beta/\gamma$  contamination measurements
- Easy to decontaminate
- ZnS(Ag) plastic scintillation detectors
- Very high sensitivity
- Detachable clothing probe
- Optical and acoustic alarm
- Extensive nuclide library
- Permanent data memory for >2000 entries

# SOFTWARE OVERVIEW

## Simple user interface and core functions

### Main menu:

The clearly structured main menu allows all relevant settings to be adjusted quickly and intuitively. These include, among other functions, configuration of the measurement time, defining alarm thresholds, and adjusting the volume of the voice output.

In addition, the system provides convenient access to the integrated database. Measurement data - such as system test results - can be easily and securely exported to a USB drive as needed.



menu overview



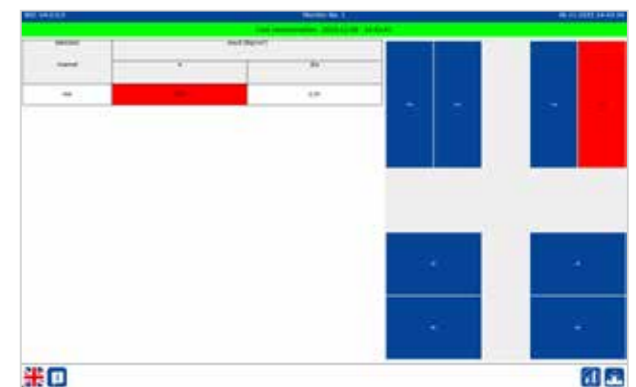
measurement

### Measurement in progress:

As soon as the user enters the HFC Scan, the measurement starts automatically using the individually preset measurement time. A built-in timer on the display shows the progress in real time, ensuring full transparency. In addition, clear voice prompts guide the user safely and conveniently through the entire measurement process.

### Last contamination:

If contamination is detected, the monitor provides maximum transparency: The results are clearly displayed in the memory overview, with the affected detector clearly highlighted. At the same time, the measurement value can be read quickly and easily - ensuring a safe and efficient assessment.



last contamination

# TECHNICAL SPECIFICATIONS

## Technical data Hand Foot Contamination Monitor

Technical Data	
<b>General Technical Data</b>	
Dimensions Standard model	875 mm x 733 mm x 1251 mm (L x W x H)
Weight	approx. 60 kg
Housing	powder-coated steel housing
Power consumption	approx. 120 VA
<b>Environmental conditions</b>	
Notes	Not suitable for outdoor use. Do not operate above 2000m above sea level.
Temperature (operation)	+5 °C ... +45 °C
Humidity (operation/storage)	75% annual average; 95% for 5 hours, non-condensing
<b>HMI</b>	
CPU	ARM Cortex –A9i.MX6
Internal memory	1 GB DDR3L
Operating memory	4 GB eMMC
Operating system	Embedded Linux
Interfaces	1 x 12 VDC in 1 x microSD Card slot 1 x USB 2.0 OTG micro-AB 1 x USB 2.0 Type A 2 x RS-232 1 x CAN-Bus 1 x LAN 1x Speaker out
Interfaces (right side)	1 x USB 2.0
Interfaces on the back	1 x LAN Potential-free contacts: • 1 x Malfunction • 1 x Contamination • 1 x Heavy Contamination • 1 x No Contamination Contact resistance: max. 1 A / 30 VDC The contacts are equipped with wire- break detection (47kΩ).
Display	Screen: 10.1" LED Resolution: 1280 x 800 Pixel Touchscreen: capacitive
Signal tower	Signal light (optional): • green • yellow • red • Signal transmitter • Contact voltage: 24 VDC, max. 250 mA
<b>Detectors</b>	
Number	4 for hands, 4 for feet, the left-hand or right-hand detector serves as a clothing probe
Type	SZ345, thin-layer plastic scintillation detector with ZnS coating
Active area	345 cm <sup>2</sup>
Transparent protective grid	83 %
Subject changes without prior notice.	

## TRANSFORMING SCIENCE INTO SOLUTIONS



Experience and expertise are of great importance to be able to ensure safety-relevant measurements properly and reliably. With more than 70 years of experience in planning and design, installation and commissioning, calibration, documentation and service of radiation protection measurement systems, we continue to support our customers in their task to continuously optimize their work processes and to ensure the safety of the environment and personnel.

### Berthold Technologies GmbH & Co. KG

Calmbacher Straße 22 · 75323 Bad Wildbad · Germany  
+49 7081 1770 · nuclear@berthold.com · [www.berthold.com/rp](http://www.berthold.com/rp)

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