

The iPCM12 takes contamination personnel monitoring to a new level. The unique sculpted geometry utilized in the Thermo Scientific PCM2 is combined with the serviceability of the Thermo Scientific IPM9 and the breakthrough electronics of the Series 12 monitors.

## Thermo Scientific iPCM12

### Installed Personnel Contamination Monitor



#### Key Features

- Excellent geometry for alpha and low energy beta detection
- Improved sensitivity due to smaller detector size
- Sum zones for distributed contamination
- Detectors easily accessible from front panel
- QuickScan technology to reduce count times
- PC-controlled, with Windows XP operating system
- Ability to monitor changing background
- Poisson statistics for accurate assessment of alarm probabilities
- ViewPoint™ capable
- Gamma option kit
- Optional ingress/egress doors

Thermo Scientific iPCM12 utilizes 21 detectors in monitoring the body, hands, and feet. The detectors are split into 4 detection zones to minimize the background during monitoring, and achieve the best detection limits. Two optional detectors can be mounted to monitor the side of the foot and the top of the head. The very best geometry is ensured, with sprung detectors making contact with the arm and the top of the shoe. Sum zones may be applied across all detectors, providing at least 250 zones per measurement and counting channel.

Multi-language voice prompts provide verbal instructions during monitoring to ensure correct positioning and actions required following an alarm. In the event of an alarm, a large touch-screen monitors displays the location of the contamination. The USB security dongle allows supervisors access to diagnostic modes to further

investigate the results.

The software is based on the 12 Series instruments. Results are stored in a database, providing both local and remote access. A QuickScan algorithm allows for faster beta and gamma contamination monitoring, particularly useful when the required monitoring time for beta and/or gamma would be longer than for alpha.

For alpha-only monitoring requirements, the iPCM12 produces its own gas, a significant cost savings over the need to procure Argon/Methane gas.

A gamma option provides up to 9 scintillation detectors, monitoring the body, head, and feet. With this option, users can set both gross and  $^{60}\text{Co}$  alarms.

## Options & Specifications

### General Specifications

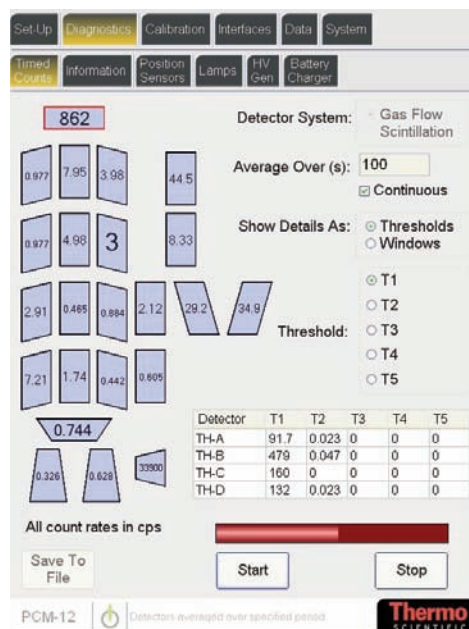
Monitor has 23 identically-sized detectors plus a purged spare

Outer Dimensions (Open Frame Unit): 725 x 940 x 2220 mm

Weight (Open Frame Version): Up to 400 kg (880lbs), depending on options selected

### Features

- Excellent alpha and low energy beta detection geometry, building on the proven PCM2 design
- Coverage area greater than PCM2 with almost 17,000 cm<sup>2</sup> detection area
- Beta contamination detection limits improved by one-third compared to PCM2
- Alarms may be set on single detectors, or sum zones, leading to very low detection limits for distributed contamination
- Quickscan may be used, significantly reducing counting time, without compromising the statistical probabilities of detection or false alarm
- Changing background indication signal will highlight significant changes in background radiation
- Rapid recovery from background changes with a dynamic background counting time
- Changing conditions alarm indicates if there is a significant change in the count rate during the monitoring period, invalidating the measurement
- All background, measurement, source checking, event log, voltage scanning is stored to an SQL database within the monitor
- Each Measurement result may be stored against a personnel identifier
- Set-up, configuration and diagnostic information is accessed via a touchscreen LCD
- User screens and voice prompts in user-selectable language
- Dongle security, with three security levels
- Calibration Integrity checking
- Windows XP operating system and Series 12 Software based upon that in SAM12 and PM12
- USB and Ethernet connectivity



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