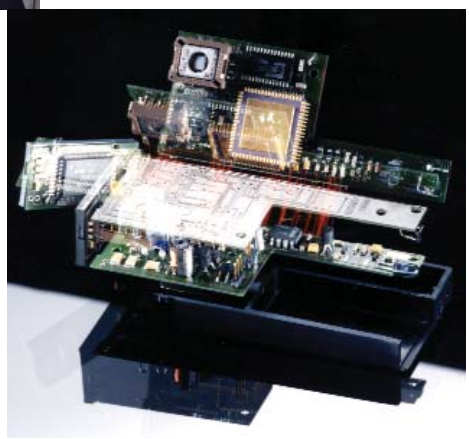
Product Specifications

Portable dose alarm for photon-radiation measurements (gamma- and X-radiation) for fire brigades and emergency services.

FH 41 F-M Dose Alarm

Digital Alarm Dosimeter

Approved by GSF with number DW/Fw/GSF-059008/1



Features

- Display of "remaining time", based on the adjusted threshold, accumulated dose and current dose rate
- Energy range from 82 keV up to 2 MeV
- More than 1000 operating hours with one standard battery
- Adjusted thresholds and accumulated dose remain stored even without any battery
- Display of battery-voltage
- No read-out instrument necessary

The portable dose alarm FH 41 F-M is used for photon-radiation measurements (gamma- and X-radiation). It was developed for health physics applications at fire brigades, civil protection and rescue organizations. The dose and the dose rate are simultaneously measured. When an alarm threshold is reached, the FH 41 F-M immediately alerts the user.

Concentrated technics

The small instrument with a weight of only 150 grams, contains an energy compensated Geiger-Müller counter tube, a microprocessor, an electronic coupling circuit and a 9 volt battery. The plastic-housing (IP 54) can be easily decontaminated. It also has a metal clip to attach the dosimeter to the clothing.

The capacity of the battery is continuously controlled. After the warning to change the battery still more than 10 h are left for service. There is no need to stop working immediately.

Four dose alarm thresholds and one preset dose rate alarm threshold provide for flexibility. By reaching one of the four dose alarm thresholds determined by the troop-leader and /or the dose rate alarm threshold the instrument gives a visual and acoustical signal for retreat.

The preselected alarm threshold and the accumulated dose remain stored even without any battery. There is no need to readjust the instrument after battery change. The current dose is displayed at all times, the remaining time on pressing the button.

The operation officer immediately recognizes the accumulated dose. In the case of health risks he can react in time, e. g. by change of personnel.

In training situations a freely adjustable dose can be set. It automatically reset after switching off the instrument. For function-check a timer mode also can be started.

Specifications

FH 41 FM Specification	
Dose alarm thresholds	5, 15, 100, 250 mSv
Dose rate alarm threshold	10 Sv/h
Feedback signal	photon equivalent dose H_x
Type of radiation	gamma- and X-radiation
Energy range:	82 keV ... 2 MeV
Temperature range:	Measurement: -30 to 50 °C (-22 to 122 °F) Storage: -40 to 60 °C (-40 to 140 °F)
Power supply:	9 V block
Operating time:	> 1000 h with one battery
Dimensions:	120 x 50 x 26 mm (4.7 x 2 x 1")
Weight:	ca. 150 g (0.3 lb) with battery
Drop strength:	height of 1 meter (39.4") onto unmade ground
Waterproof	degree of protection IP 54
Noise level	80 dB from 30 cm (approx. 12") distance at +20 °C (68 °F)

Detector Specification

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