

Electronic Personal Dosimeter

NRF51

X, γ , neutron



All-in-one dosimeter

Emergency call button

Large backlit LCD display

**Integrated communication
and telemetry function**

Specification

Versatile and all-in-one, the NRF5 Series dosimeters can be used stand-alone or integrated into a dosimetry or remote dosimetry system.

They can be used to reinforce the protection of workers in controlled areas or areas likely to be exposed to ionising radiation.

They are perfectly suited to the requirements and applications of:

- Nuclear power plants and fuel cycle,
- Decommissioning activities,
- Military defence and civil security: Protection of first responders,
- Research laboratories and education,
- Particle accelerators,
- Industrial activities and non-destructive testing,
- Medical environment (radiological platform).

Reference Standard	IEC61526 Ed.3.0 and ANSI N42.20		
Radiation measured	Hp(10) - X-rays and Gamma (γ) radiations Hp(10) - Neutron		
Detector	Silicon semiconductor		
Measurement Range	γ (X) rays:	Dose	1 μ Sv to 10 Sv
		Dose rate	0,1 μ Sv/h to 10 Sv/h
	Neutron	Dose	10 μ Sv to 10 Sv
		Dose rate	1 μ Sv/h to 10 Sv/h
Display Range	γ (X) rays:	Dose	1 μ Sv to 10 Sv
		Dose rate	0 μ Sv/h to 10 Sv/h
	Neutron	Dose	1 μ Sv to 10 Sv
		Dose rate	0 μ Sv/h to 10 Sv/h
Energy Range	γ (X) rays:	30 keV to 7 MeV	
	Neutron	0,025 eV to 15 MeV	
Energy Response	γ (X) rays	$\pm 20\%$ (50 keV to 6 MeV)	
	Neutron	$\pm 50\%$ (250 keV to 4,5 MeV)	
Angular Response	γ (X) rays	$\pm 20\%$ (^{137}Cs , 0° to 75°); $\pm 50\%$ (^{241}Am , 0° to 75°)	
	Neutron	$\pm 30\%$ (^{241}Am , 0° to 75°)	
Accuracy	γ (X) rays	$\pm 10\%$ (^{137}Cs)	
	Neutron	$\pm 15\%$ (^{252}Cf or $^{241}\text{Am-Be}$)	
Dose Rate Linearity	γ (X) rays	$\pm 10\%$ (^{137}Cs)	
	Neutron	$\pm 20\%$ (^{252}Cf or $^{241}\text{Am-Be}$)	
Display	Dot LCD (128x48); View area: 43,5mm x 16,3mm		
LED	Flash red Led x 3; Auxiliary Led x 3 (green, orange, red)		
Buzzer	Piezzo-electric buzzer (90 to 100 dB @ 30cm)		
Communication	USB; Infrared; Electromagnetic induction; Bluetooth; 900Mhz radio or Wi-Fi (selectable)		
USB Interface	USB2.0 micro-B (Use for power supply and communication)		
Data Storage	Trend Data (historical data): Up to 4000 (Date/time, Dose, Dose rate, Status)		
	Entry/Exit data: Up to 1000		
Battery	Primary AA (LR6) battery x2		
Battery Life	Continuous use 2500 hours (without alarm/communication)		
Operating Temperature	-10°C to $+50^\circ\text{C}$		
Operating Humidity	$\leq 95\%$		
Waterproof	IP65/67		
EMC	MIL STD 461F		
Dimensions	60 x 105 x 29 mm		
Weight	$\leq 100\text{g}$ (without battery); approx 170g (with 2 battery)		
Other Features	Vibrator; Call Button (Emergency alarm); Thermistor (for temp. Compensation)		
	External Battery via USB-micro B port; Accelerometer		
Accessory Functions	Stopwatch; Notepad (32 characters)		



Emergency call button



FUJI ELECTRIC FRANCE S.A.S.

46, rue Georges Besse - ZI du Brézet
 63039 Clermont-Ferrand Cedex 2 - France
 Tel. France 04 73 98 26 98 - Fax. 04 73 98 26 99
 Tel. international +33 4 73 98 26 98 - Fax. +33 4 73 98 26 99
 Email : sales.dpt@fujielectric.fr
 Web :www.fujielectric.fr

Fuji Electric cannot be held responsible for any errors in our catalogues, brochures or other printed media. Fuji Electric reserves the right to modify its products without notice. This also applies to the products ordered, if the modifications do not alter the specifications substantially. The registered marks and names which appear in this document are the property of their respective depositors. All rights reserved.