

Semiconductor Personal Dosimeter

SPD-9300

Semiconductor Personal Dosimeter SPD-9300

- Year basis to meet the international standards IEC 61526 2010
- KRISS, KAERI: Radiological test
- KTL: EMI, EMC certification and environment tests
- Apply semiconductor sensors
- Excellent x, γ -ray sensitivity of the reaction
- Compact Size

www.sftechnology.co.kr



Semiconductor Personal Dosimeter

SPD-9300

SPD-9300 is a precise measuring instrument of radiation that not only instantly displays the user data of radiation, but also supplies various data to exposure management system through RF communication so that radiation exposure is systematically managed. This product minimizes the radiation exposure of workers under radiation working environment by applying the basic radiation defending concept (ALARA).

The switch mode design makes possible either use of System Type which is used along with radiation exposure management system of atomic power plants and atomic power facilities or Stand Alone Type which is used on its own.



Applications

Nuclear facilities, non-destructive testing (NDT), hospitals, anti-terrorism, industrial, 119 Rescue, national defense, environment, etc. The basic concept of radiation protection (ALARA) by applying the radiation exposure of workers to jobs. This product is able to minimize.

Radiological

IEC61526 (2010)

display units

- dose : Sv or rem (uSv, mSv, Sv, urem, mrem, rem)
- dose rate : Sv/h or rem/h (uSv/h, mSv/h, Sv/h, urem/h, mrem/h, rem/h)

measurement range

- dose : 0.1 uSv to 10 Sv (0.01 mrem to 1000 rem)
- dose rate : 0.1 uSv/h to 1 Sv/h (0.01 mrem/h to 100 rem/h)

display

- dose : 1 uSv to 10 Sv (0.1 mrem to 1000 rem)
- dose rate : 1 uSv/h to 1 Sv/h (0.1 mrem/h to 100 rem/h)

linearity

- dose : $\leq \pm 10\%$
- dose rate : $\leq \pm 15\%$ up to 1 Sv/h

accuracy

- $\leq \pm 10\%$ (^{137}Cs , at 10 mSv/h)

energy

- X and Gamma energy range : 30 keV ~ 6 MeV
- X and Gamma energy measurement range : -29% to +30%, 50 keV ~ 3 MeV (at ^{137}Cs)

angular

- $\leq \pm 20\%$ (^{137}Cs , $0^\circ \sim 60^\circ$)

detected radiation

- X and Gamma ray

detector

- semiconductor

Electrical and Mechanical

IEC61526 (2010)

power supply

3 V Lithium button cell (CR2450), Life time : > 6 months

alarm sounder

85 dB(A) at 10 cm, 3 different tone

size

80 x 48 x 20 mm (excluding clip)

weight

55 g (including battery and clip)

communication : radio frequency

button : single

memory

will store up to 512 data

Environmental

IEC61526 (2010)

operating temperature : -10 °C to 50 °C (+15 °F to 122 °F)

humidity : 40 % to 90 %, RH, at 35 °C

storage : -25 °C to 50 °C

drop : 1.0 m onto steel surface

vibration : 2 g, 10 Hz to 30 Hz, 15 min

microphonics : 60 times 0.1 m on steel surface

EMI / EMC : IEC 61000-4-2, 3, 8

Option

Private ADR Reader PDR-9300



The personal leader for electronic personal dosimeter (SPD-9300) was designed to make everybody manage the data of the electronic personal dosimeter easily by saving and editing them after installing a software RAD-Reader in a personal PC with the communication method of RF radio communication with the personal dosimeter and using RS-232C or USB.

Product Specifications

- Display incoming communication LED Flashing
- SPD-9100 and RF communication capability
- Rad Reader software
- The Personal Dosimeter Reader USB port using
- USB Cable uses its own power
- Personal Dosimeter RS-232C port using a Reader
- RS-232C uses a 9V DC adapter
- Temperature: 10 °C ~ 50 °C
- Humidity: 90 %, HR, 35 °C
- Weight: 1.2Kg
- Size: 99 x 89 x 104 mm



SFTechnology. Co., Ltd.

Rm, 505,506 Leaders Tower 60-15 Gasan-dong, Geumcheon-gu
Seoul, 153-790 KOREA

TEL : +82-2-837-8060 FAX : +82-2-837-8065

www.sftechnology.co.kr

To improve the performance of this product are subject to change without notice.