Semiconductor Personal Dosimeter

SPD-9100

SFT Sans Frontier Technology

Semiconductor Personal Dosimeter
SPD-9100

- DOSE / DOSE RATE MODE
- Real-time dose LCD DISPLAY
- Stand ALone Type / System Type convertible
- System operating software
- Ultra portable
- High sensitivity & high reliability and precision

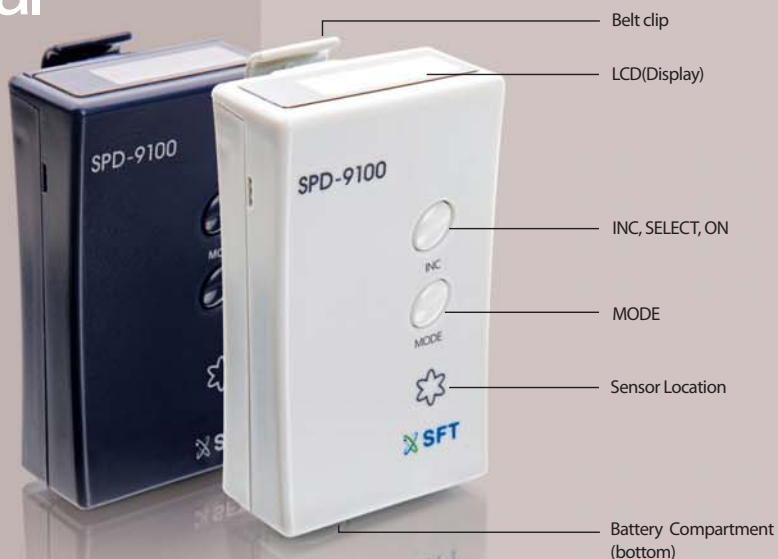**www.sftechnology.co.kr**

SFTechnology. Co., Ltd.

Semiconductor Personal Dosimeter

SPD-9100

Electronic Personal Dosimeter developed by "SFT" shows users information about amounts of radiation and all kinds of information by infrared communication in real time and can manage all kinds of information systematically by providing the system to manage radiation exposure by it as the precise equipment to measure radiation.

It was designed to be changed from the system type to the stand alone type which is used in nuclear power plants and atomic energy facilities as the electronic personal dosimeter.

It shows about information about personal amounts of radiation in LCD in real time using the latest microprocessor technology as the precise equipment to measure radiation and warns exposure to radiation with the LCD lamp and the warning call.

Belt clip
LCD(Display)
INC, SELECT, ON
MODE
Sensor Location
Battery Compartment (bottom)

Applications

It can minimize radiation exposure in the working environment of radiation by applying the basic concept of radiation protection (ALARA) including atomic energy facilities, NDT, antiterrorism, industry, 911 rescue, national defense.

Radiological

IEC61526

display units
- dose : Sv (uSv, mSv, Sv)
- dose rate : Sv/h (uSv/h, mSv/h, Sv/h)

measurement range
- dose : 0.1 uSv to 10 Sv
- dose rate : 0.1 uSv/h to 1 Sv/h

display
- dose : 1 uSv
  to 10 Sv or 0.01 uSv to 10 Sv (Extended option)
- dose rate : 1 uSv/h to 1 Sv/h
  or 0.01 uSv/h to 1 Sv/h (Extended option)

linearity
- dose : <± 10 %
- dose rate : <± 15 % up to 1 Sv/h

accuracy
- <± 10 % (^{137}Cs, at 10 mSv/h)

energy
- X and Gamma energy range : 30 keV ~ 6 MeV
- X and Gamma energy measurement range :
  <±30%, 50 keV ~ 3 MeV

angular
- <± 20 % (^{137}Cs, 0° ~ 60°)

detected radiation
- X and Gamma ray

detector
- semiconductor

Electrical and Mechanical

IEC61526

power supply
single AA battery 3.6 V Lithium (Life time : > 12 months),
single AA battery 1.5 V Alkaline (Life time : > 6 months)

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

size
80 × 48 × 24 mm (excluding clip)

weight
93 g (including battery and clip)

communication : Infra red

button : 2 buttons

Environmental

IEC61526

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

humidity : 40% to 90%, RH, at 35℃

storage : -25℃ to 50℃

drop : 1.5m onto wood surface

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

microphonics : 60 times 0.1 m on steel surface

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

Option

Private ADR Reader PDR-9100

The personal leader for electronic personal dosimeter (SPD-9100) 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 IR radio communication with the personal dosimeter and using RS-232C or USB.

Product Specifications

- Display incoming communication LED Flashing
- SPD-9100 IR 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: 1.2 Kg
- Size: 99 x 89 x104 mm