TA100 CdTe

This device is a handy type compact dosimeter which not only displays the general dose rate display (µSv/h) but also the gamma ray nuclide is found by spectrum (graph). It is possible to transfer data to PC by USB communication.

Range of dose rate 0.01 μSv / h – 10 mSv / h

Detector CdTe 10 x 10 x 1 mm

Energy response
Within ± 15 % (Energy compensation)

Energy range 20 keV - 1.5 MeV

Energy resolution 3 % (Cs-137, 662 keV, Typ.)

Throughput 50,000 cps

Sensitivity 800 cpm (μSv / h)

Function Identifies dose rate, cumulative dose,

spectrum and nuclide

Overview

The detector of this device uses a **CdTe** (cadmium telluride) semiconductor. It has higher atomic number (48, 52) than silicon semiconductor, has high energy radiation absorption power, and can operate at normal temperature. This detector has excellent energy resolution of 3% (Cs-137, 662 keV gamma ray). In spectral mode, nuclide identification is possible and discrimination between Cs-134 and Cs-137 is possible. Energy compensation is realized by the latest electronic circuit and accurate dose rate is displayed in a wide range of 0.01 μ Sv / h to 10 mSv / h. The power supply can be used for about 15 hours continuously with built-in lithium battery. It adopts organic EL display and it is very compact, but it is easy to see. It has PC application software for Windows, so it is possible to transfer data to the PC via USB communication and save the file in CSV format.

Specifications

Range of dose rate	0.01 μSv / h - 10 mSv / h	
Detector	CdTe semiconductor 10 x 10 x 1 mm	
Energy response	Within ±15 % (Energy compensation)	
Energy range	20 keV to 1.5 MeV	
Energy resolution	3 % (Cs-137, 662 keV, Typ.)	
Throughput	50,000 cps and more	
Sensitivity	800 cpm (μSv / h)	
Dose rate time constant	AUTO, 3 sec, 10 sec, 30 sec, 60 sec, 90 sec	
Dose rate energy compensation	512 stages	
Alarm function	Alarm by threshold of dose rate	
Energy spectrum	512 channels	
Nuclide identification function	11 nuclides such as Cs-134, Cs-137, I-131, Co-57, and Co-60	
Indicator	Organic EL display 128 x 64 dots	
Built-in power	Lithium-ion polymer charging battery, 2000 mAh	
Operating time	About 15 hours in a row	
External dimensions	67 (W) x 115 (H) x 28 (D) mm	
Weight	About 180g	
Environmental condition	Operating temperature: 0 - 40 degrees, No dew condensation	*In *P



Spectrum mode

Example: Cs-134 and Cs-137 of soil



Dose rate mode

Time constant AUTO, dose rate and accumulated dose



*Images is for illustration purpose.

*Please note that contents may change without prior notice.

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