

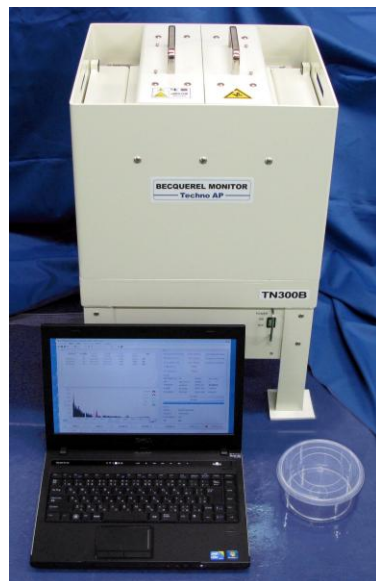
Radioactivity measuring device TN300B Becquerel Monitor

High-sensitive NaI(Tl) scintillation detector

MADE IN JAPAN

TN300B is a radioactivity measuring device for food, soil, etc.... It is very easy to measure. So, anyone can be used with simple operation. The measurement results are shown in Bq/kg in real time. Equipped with Thallium doped Sodium Iodide (NaI(Tl)) which is a high-sensitivity, has been achieved to shorten the measurement time to improve the measurement accuracy. Additionally, it is ideal for screening test.

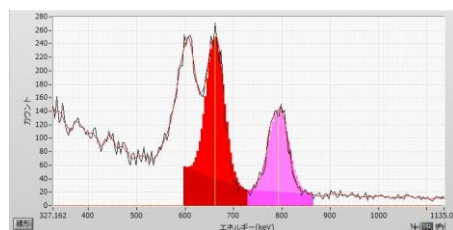
- **Function** Radioactivity measuring
- **Measurable limits**※ (net countable number of values $\geq 3\sigma$)
 - ^{137}Cs 7Bq/kg (1L marineri, 10 min)※¹
 - ^{137}Cs 5Bq/kg (1L marineri, 20 min) ※¹
 - ^{137}Cs 16Bq/kg (V-5, 10 min) ※¹
 - ^{137}Cs 10Bq/kg (V-5, 20 min) ※¹
- **Nuclide identification** ^{137}Cs , ^{134}Cs , ^{131}I , ^{40}K
- **Weight** About 225kg
- **Energy range** 50keV ~ 2MeV
- **Detector** NaI(Tl) scintillation $\phi 3$ inch \times 3 inch
- **Energy resolution** 7.0% (^{137}Cs , 662keV, typ.)



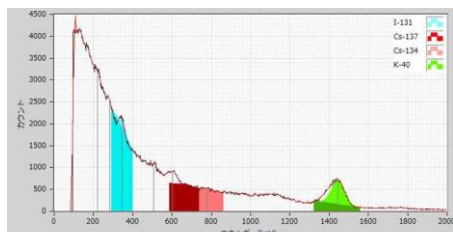
TN300B Becquerel Monitor

Spec.

Model	TN300B Becquerel Monitor
Detector	NaI(Tl) scintillation $\phi 3$ inch \times 3 inch
Function	Radioactivity measuring (Unit: Bq/kg)
Nuclide identification	^{137}Cs , ^{134}Cs , ^{131}I , ^{40}K (simultaneous measuring)
Measuring object	Food (meat, fish, vegetable), soil, and water, etc
Measuring object container	V-5 container (630ml), Marineri container(1L)
Measurable limits (net countable number of values $\geq 3\sigma$)	16Bq/kg (10min, ^{137}Cs , V-5 container) ※ ¹ 10Bq/kg (20min, ^{137}Cs , V-5 container) ※ ¹ 7Bq/kg (10min, ^{137}Cs , 1L Marineri container) ※ ¹ 5Bq/kg (20min, ^{137}Cs , 1L Marineri container) ※ ¹
Measurement time	10 min ~
Energy range	50keV ~ 2MeV 1024 channel
Energy resolution	7.0% (^{137}Cs , 662keV, typ.)
Energy calibration	^{40}K
Shielding lead thickness	50mm
Becquerel Monitor Software	peak search: The anti-jaggy secondary differential calculus peak search law The peak center way of calculation: Three meter numerical methods of the secondary differential-coefficient peak count: peak area law peak's separating: The compound peak separates by the gauss fitting.
External dimensions	430(W) \times 400(D) \times 650(H) (Unit: mm)
Weight	About 225kg
Environmental condition	Operating temperature 0~40°C, No dew condensation
Unit and accessory	main unit with TN300B, Becquerel Monitor software, laptop PC, Printer, V-5, 1L marineri, USB cable, manual
Software for PC	Windows 7,8,1,10 with Excel



Becquerel Monitor software Spectrum Chart
Col.Red: Cs-137(662keV), col.Pink: Cs-134(796keV)
※The compound peak separates by the gauss fitting.



測定値	不検出
セシウム合計	不検出<1.8Bq/kg
セシウム137	不検出<0.8Bq/kg
セシウム134	不検出<1.0Bq/kg
ヨウ素131	2.2Bq/kg \pm 0.6Bq/kg
カリウム40	56.5Bq/kg \pm 3.3Bq/kg
サポート情報	天然の放射性物質が含まれている可能性があります。

When natural radioactive materials ^{214}Pb , ^{214}Bi are detected, a warning is displayed in the support information.

※¹. These values are different from the background environment, measurement time and specific gravity.
※ Please note that contents may change without prior notice

Techno AP

Design and fabrication of electronic circuit associated with measurement control and radiation measurement

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