

RAD IQ™ FS200/FS300

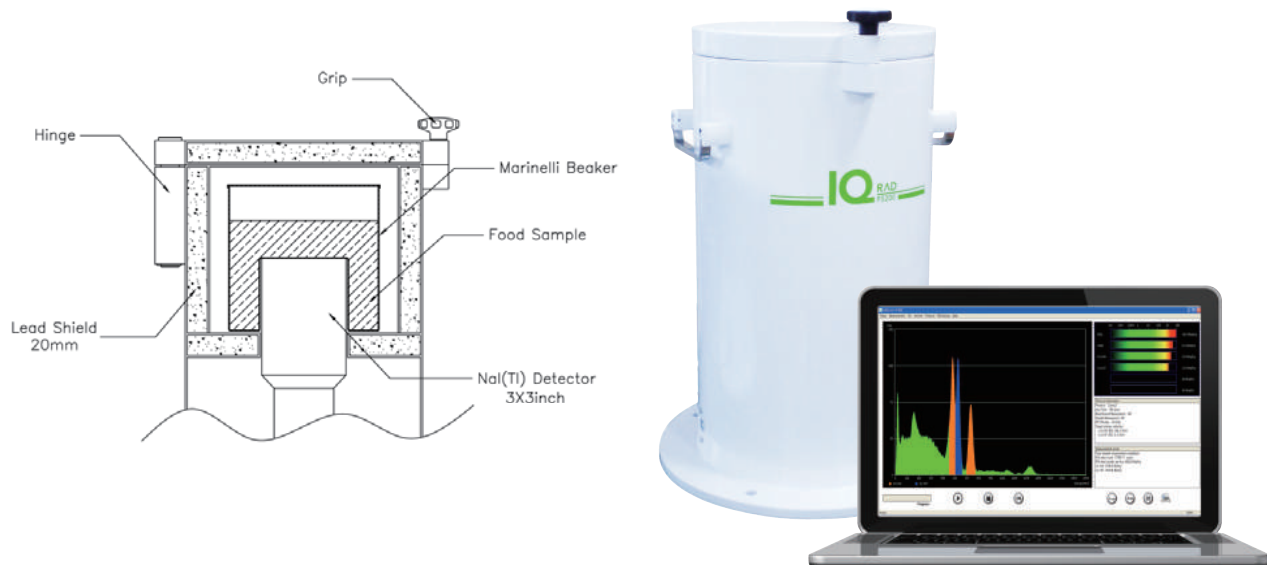
Food Radiation Monitor

A cost-effective food monitoring solution !

The RAD IQ™ FS200/FS300 food monitoring system measures radiation levels in food, water and soil samples. It is designed to accommodate industry standard 1L Marinelli Beakers and will accept a selection of smaller sizes.

The system includes a 3x3 inch NaI(Tl) detector system installed in a 20 mm (0.78 in.) lead shield. The system weight is approximately 48 Kg (106 lbs). For applications where transportability is less important an optional 30 mm (1.18 in.) lead shield is available. The system weight becomes approximately 75 Kg (165 lbs) with the heavier shield (RAD IQ™ FS300 model).

The specific nuclide analysis software provided reports the levels of Iodine, Cesium, and other radionuclides identified in the sample. The system is designed to satisfy the requirements and regulations governing the food industry. Nutec Solutions provides the complete system including the necessary PC computer. Installation and training support are available.



Key features

- Nuclide Specific Analysis – reports presence of Iodine and Cesium radionuclides and others
- 4π shielding (except for the detector insert hole opening)
- Accommodates up to 1 liter volume Marinelli Beakers
- Suitable for both main laboratory and on site field laboratory use
- Light weight and networkable design supports rapid deployment to emergency site laboratory

Key Specifications

Detection limit ¹⁾	25 Bq/kg @ 10 min 10 Bq/kg @ 10 min ²⁾	Radionuclides Identified	Iodine and Cesium families, others
System Weight	48 kg (106 lb) or 75 kg (165lb) ²⁾	Lead Shield Dimensions	234(Ø)×428(H) mm 256(Ø)×460(H) mm ²⁾
Detector	Nal(Tl), 3×3 inch	Resolution	7% ± 1% @ 662keV(Cs-137)
Energy Range	20 to 2000 keV	Digital MCA	4096 channel resolution
Network Comms	USB 2.0	Operating Temperature	-15°C(5°F)~50°C(122°F)

1) Using 1 liter Marinelli beaker @ background dose rate of 0.1 uSv/h
2) FS300 model

Application Example

The display provides the user with spectral information, total activity, confident levels for identified radionuclides, measurement conditions, and the measurement result as shown below. In addition, a detailed printed report is available which may be customized to specific requirements.

