

Thyrowiz™

Thyroid Uptake System

Thyrowiz™ The next generation thyroid uptake system

With a novel arm design and a patent pending AF technology, the ThyroWiz™ thyroid uptake system is a high quality value leader device that offers total customer satisfaction.

The perfect balance of its spring-loaded scissor arm and novel joint design permits smooth operation and maneuverability while securing trustworthy placement of the detector head at any position. The ThyroWiz™ consists of low noise preamplifier with built in self gain stabilization function, low ripple high voltage supplier and a true digital MCA. The MCA (multi-channel analyzer), the heart of the ThyroWiz™, is equipped with a 32 bit RISC micro-processor that enables fast AD conversion and network connection via USB-II. The system-integrated digital MCA unit provides features not found on any other thyroid uptake system.

Equipped with a lap-top computer and a small footprint design, the ThyroWiz™ is a perfect fit for small departments and clinics. The ThyroWiz™-Wall model is especially suitable for extremely limited spaces. User friendly application software provides advanced GUI (graphic user interface) that guides an operator with step-by-step instruction throughout all procedures, calibration, quality control and more.



Thyrowiz™ Wall



Thyrowiz™ Basic



Thyrowiz™ Plus

Key Specifications

Detector	Nal(Tl) (2x2 inch)	MCA	32 bit RISC, ARM® Cortex™-M3
Energy range	20 – 1000 keV	Resolution	6.5% ± 1% @ 662keV(Cs-137)
Dimension	1220(W)×600(D)×1780(H) mm (PLUS) 720(W)×130(D)×1050(H) mm (WALL)	Weight	PLUS : 110kg(242lb) WALL : 45kg(99lb)
Maximum count rate	150 kcps	Power	Standard 100–240V 50/60 Hz
Calibration	Cs-137 10 uCi (2.54×0.254 cm) uncollimated	Optional items	Well counter, Thyroid Phantom, Calibration source, Attenuation filters

Key features

EASY OPERATION AND MANEUVERABILITY

The perfect balanced spring-loaded scissor arm enables the movement of the detector head to be smooth and effortless. Additionally, the combination of 4 hinges and 3 rotational joints provide trustworthy placement of maneuverability.

MEASUREMENT OF HIGH RADIATION FLUX

The patent pending AF (attenuation filter) technology enables the system to measure virtually any amount of incoming radiation without signal pile-up and saturation. For example, being equipped with the appropriately designed AF, the ThyroWiz™ device can measure administered activity of 5–10 mCi of $^{99m}\text{TcO}_4$ which corresponds with a thyroid scan dose.

ERGONOMIC DESIGN & SMALL FOOTPRINT

The system integrated digital MCA and DAQ eliminates the need of desk-top based PCI cards for data acquisition. Ergonomic and small footprint design becomes easier with a lap-top computer. By option, customer can choose the ThyroWiz™-Wall model for extremely limited spaces.

USER FRIENDLY APPLICATION SW & GUI

Specifically designed application software and graphic user interface for the way a user takes thyroid uptake, calibration, quality control and imaging protocol, has all been designed to maximize operational efficiency and convenient.