

Captus[®] 700t Thyroid Uptake System

Fast, Accurate, High Quality at Low Cost!

With the Captus[®] 700t Thyroid Uptake System, performing thyroid uptake measurements has never been easier with the **new color touch screen interface**.

The software program provides fast, dedicated modules for Thyroid Uptake, Wipe Tests, Bio-Assay, Schilling Test, Blood Volume, and RBC Survival.

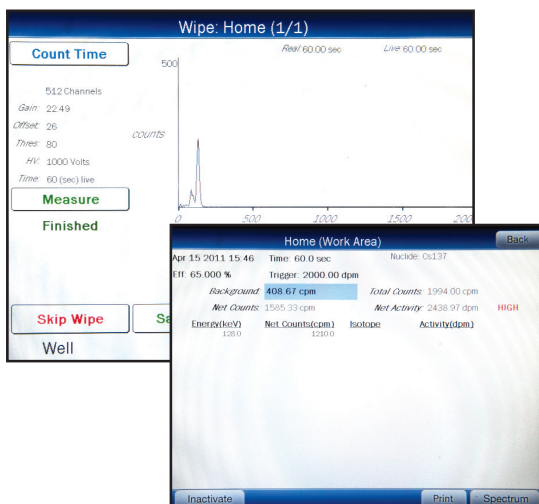
QA is automated with a new Minimum Detectable Activity Function. Constancy, Calibration and Chi Square functions are all easy to perform. System calibration is simple and automatic on the Captus[®] 700t with the use of Cs-137 and Eu-152 reference sources.

The Multi-Channel Analyzer is very user friendly. ROI's can be selected from a convenient menu of isotopes with pre-defined regions, or the user can define them. Results are reported with full spectrum counts and counts by region of interest. All results can be saved on the instrument.

In this module, multiple TU protocols can be established utilizing I-123, I-131 or Tc-99m. The protocols can use a standard capsule method or allow the system to perform an automatic decay correction to the administered dose. The system will store detailed patient demographics, physician data and administered dose data. There is no limit to the number of uptakes that can be performed, and the results will be reported with detailed count information and automatic percentage uptake calculations.

Diagnostics and Tests:

- Quality Assurance Section includes zero adjust, automatic gain adjust, detector energy calibration resolution, chi-square, constancy, MDA, automatic efficiency calculation and storage.
- Thyroid Uptake Section allows entry of patient demographics and procedure protocol. The standard may be measured at each uptake or automatically decay-corrected by the software. The number of uptakes performed on patients is user-defined with the software calculating each uptake and storing that information on the instrument or printing it out in report form.
- Wipe Testing is state-of-the-art and with a simple menu-driven format. The system will perform a peak search on each wipe identifying any contamination by peak and by nuclide. The user decides how many wipe locations are entered; there are no location limits. Trigger levels may be selected on a user-specified limit set to flag wipes above a specific activity level. Wipes may be grouped by location type.
- The Blood Volume section offers both I-125 and Cr-51 methods with step-by-step guidance through the counting procedure and automatic calculation of the results.
- Red Blood Cell Survival.
- Bioassay for Staff allows counting of personnel with only one neck count. Staff records, as with other test results, are maintained and archived on the instrument and/or through printed records.



Captus[®] 700t Thyroid Uptake System: Item #5430-3137

Captus[®] 700t Thyroid Uptake System

with Well: Item #5430-3138

Optional 2 inch Shielded Well: Item #5430-0069



Thyroid Uptake Stand Dimensions

- Height: 69" (175.3 cm)
- Width: 28" (71.1 cm)
- Depth: 31" (78.7 cm)
- Weight: 400 lbs (181.8 kg)
- w/optional well: 470 lbs (213.6 kg)

Console Dimensions

- Height: 9.5" (42 cm)
- Width: 9" (23 cm)
- Depth: 10.5" (27 cm)
- Weight: 7.5 lb. (3.4 kg)



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Thyroid Uptake Module:

Select Dose Measurement

Edit Thyroid Uptake Protocol

Name:

Counting Method:

Dose Measurement:

Isotope: Dose Form: Pre Dose: Yes Residual: No

Counting Time: Probe Distance:

I123 ROI (keV): to

I131 ROI (keV): to

Tc99m ROI (keV): to

Thyroid Uptake Measure Dose

Patient ID:

Name:

Status:

Background(cpm): (May 09 2011 11:47)

	Count 1(cpm)	Count 2(cpm)	Average(cpm)
Capsule #1 in Phantom at 25 cm	<input type="text" value="4631"/>	<input type="text"/>	<input type="text" value="4631"/>
Capsule #2 in Phantom at 25 cm	<input type="text" value="8624"/>	<input type="text"/>	<input type="text" value="8624"/>
Capsule #3 in Phantom at 25 cm	<input type="text" value="7411"/>	<input type="text"/>	<input type="text" value="7411"/>

Total:

Net Counts = Total - (Num_of_Doses * Background) = 20486 cpm

Wipe Test Module:

Add New Wipe Location

Location:

Trigger Level:

Count Time:

Wipe Type

- Work Area
- Unrestricted Area
- Sealed Source
- Package

Nuclides

<input type="text" value="I 125"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Setup Wipe Locations

Location Name	Wipe Type	Trigger
Ters	Work Area	2000.00 dpm
Kitchen	Work Area	2000.00 dpm
Dark room	Sealed Source	5,000 nCi



Captus[®] 700t Thyroid Uptake System

Display Screen

- Type: 8" VGA LCD Color Touch Screen Display
- Patient Demographics
- Test Results
- Spectral Display

Detector

- 2" x 2" shielded NaI (TI) crystal with standard or optional Pediatric/Bioassay collimator

Well Detector

- Optional well type NaI (TI)
 - 1: Well Diameter: 1.6 cm max (5/8")
Depth: 4 cm (1 1/2")
Lead: 2.5 cm (1")
 - 2: Well Diameter: 1.6 cm max (5/8")
Depth: 4 cm (1 1/2")
Lead: 5" cm (2")
- * (Lined with brass to minimize backscatter)

Multichannel Pulse Height Analyzer

- 512 Channels
- Linearity - within 2% full scale
- Differential Linearity - 2% SD
- A to D conversion time - 10 microseconds
- Low Energy Discrimination Level - 16 KeV, 4 Channels (whichever is greater)
- ROI - Automatic or Manual (ROIs can be saved)
- Background subtraction and mean energy calculation via curve fittings
- Maximum Count Rate - 100,000 counts per second (Real Time)
- Linear Display - Automatic/Manual

Nuclide Data

- Over 95 Nuclides in Memory (major gamma-ray energies and intensities, half-life)

Utilities

- System Setup
- Data Entries (Wipe Test locations, Staff Bioassay Data, Nuclear Data, etc.)
- Staff Bioassay Report Generation
- Multichannel Analysis (MCA)

Diagnostics and Tests

- Full system self-diagnostics including all program and data memories
- Comprehensive test programs include automatic Chi-Squared and FWHM, and MDA

Printer

- Inkjet Color Printer
- Print results of studies including graphic displays

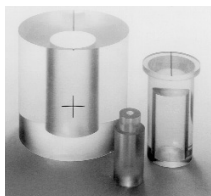
Thyroid Uptake Stand

- Rugged floor stand with spring arm and shelves
- Heavy duty locking casters
- Base designed to hold Shielded Well Detector

Power Requirements

- Standard: 115V .25A 90-127V 50-60Hz
- Optional: 220V .125A 180-250V 50-60HZ
(With circuit protections, line filter and isolation transformer)

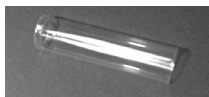
Optional Accessories



Neck Phantom:
Item #5230-0038



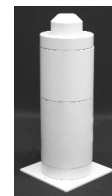
Wipe Spot Pads (Box of 500): Item #5420-0086



Test Tubes for Wipe Samples (Qty. 100): Item #5420-0090



Table Top Stand:
Item #5430-2038



Well Detector (2" Shield):
Item #5230-0069



Eu-152- (0.5 µCi Rod):
Item #0975-152R
Cs-137- (0.5 µCi Rod):
Item #0975-137R



Rod Source Holder:
Item #7315-1850



Wall Mount Stand:
Item #5430-3095



Drilled Well Crystal:
Item #5430-0081



Scientific House, The Henfield Business Park,
Shoreham Road, Henfield, West Sussex, BN5 9SL
Tel: +44 (0)1273 497600
Email: info@southernscientific.co.uk