



MIRION
TECHNOLOGIES



THYROID UPTAKE SYSTEMS

Captus[®] 4000e Thyroid Uptake System

*Large Touch Screen Interface
Fully Integrated DICOM*

FEATURES

- New and improved color touch screen user interface
- Large 20 inch all-in-one touch screen computer
- Optional fully integrated DICOM interface for patient data, QC and wipe tests
- Custom Protocol included as standard
- Ergonomically designed mobile stand
- Articulating arm with wide range of motion
- Medical-grade Corian countertop with document storage shelf
- Secure neck phantom storage location
- Source holder for reproducible QC positioning
- Microsoft Office Professional 2010 option

DESCRIPTION

The Captus 4000e unit is a comprehensive Nuclear Medicine Measurement System, with specific software modules for thyroid uptake, bioassay, wipe tests, automated quality assurance tests, and isotope library. The system includes a fully functional 1024 channel MCA with auto and manual calibration. Timed activity mode features a programmable repetitive timed measurement program.

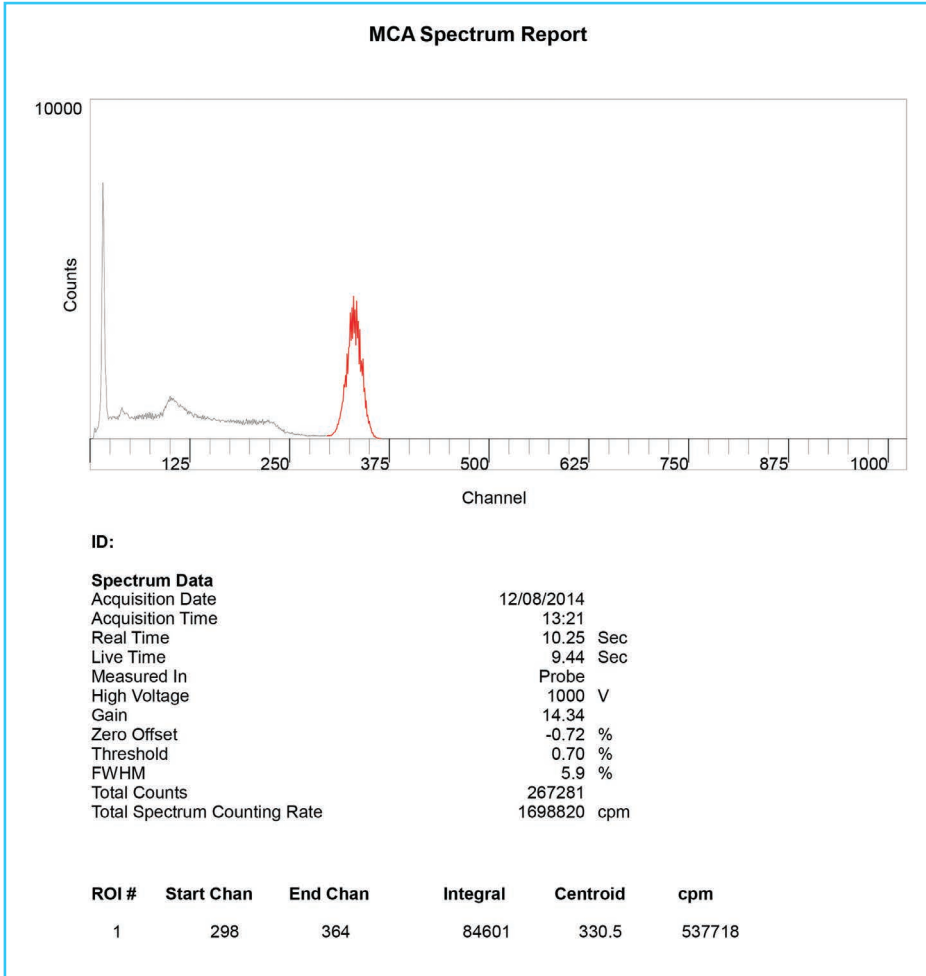
Improved menu driven workflow and large 20 inch color touch screen streamlines user interface.

The optional fully integrated DICOM interface communicates directly with hospital information systems, and can transfer patient, wipe test, and QC data. Custom Protocol is included as standard, and Microsoft Office Professional 32-bit software is optional.

New and improved stand provides ergonomically adjustable monitor and easy to position articulating collimator arm. Four sided comfortable handle grips and swivel wheels ensure easy mobility. PC can be attached to either right or left side to optimize workspace.

Captus 4000e Reports:

Reports include color graphics and isotope spectrum. Thyroid report includes time vs. uptake value graph. Out of range results are flagged. Reports can be printed or saved as .pdf files.



OPTIONAL COMPONENTS



Neck Phantom



Well Detector (2 in. Shield)

Captus 4000e | THYROID UPTAKE SYSTEM

Software Features:

Diagnostics and Tests

- Fully automated Quality Assurance Section includes energy calibration, zero adjust, gain adjust, detector efficiency, detector resolution, chi-square, constancy, and MDA
- Manual calibration available in MCA module

Thyroid Uptake

- Provides four predefined protocols
- Supports both capsule and liquid dose formats
- Dose may be pre-counted before patient assignment
- Predose measurement option
- Normal range option

Wipe Tests

- Setup for multiple groupings
- Isotope identification available
- Spectrum is displayed for each wipe
- Activity exceeding trigger levels flagged in red

MCA

- 1024 channels
- Automated and manual calibration selection
- Preset or user defined ROI
- Count set by real time, live time, or total peak counts
- Timed activity feature enables predefined continual repetitive measurements

DICOM Interface (Optional)

- Fully integrated interface with Captus 4000e system
- Retrieve patient data from worklist
- Upload patient, wipe test, and QA reports

Bioassay

- Monitors Staff for I-123, I-125, and I-131 exposure
- User defined action levels for each isotope
- Individual and summary reports available

Custom Protocol

- Create Custom Measurement Sequence
- Customizable Reports

Reports

- Reports include full spectrum graphics
- Thyroid report includes time vs. uptake value graph
- Data is archived
- Reports can be printed or saved as a .pdf file

Power:

Line Voltage

- 120 V ac, 60 Hz, 2.6 AMP
- 230 V ac, 50 Hz, 1.1 AMP
- Isolation Transformer with hospital grade cord and plug

Hardware Specifications:

Thyroid Uptake Stand

- Ergonomically designed floor stand
- Medical grade Corian countertop with shelf
- Adjustable height PC stand, left or right side mounting
- Articulating arm with 34 in. vertical range of travel and 220° collimator rotation
- Protective cable management system
- Neck phantom storage location
- Fully protected internally routed cables
- Four heavy-duty locking casters that swivel 360°
- Isolation transformer for patient and user safety
- QA source holder for reproducible geometry

Computer

- 20 in. All-in-One Touch Screen Flat Panel Computer
- Windows 10 Platform

Printer

- Color Ink Jet printer

Uptake Detector

- 2 in. diameter 14-pin NaI(Tl) detector with 1.55 in. deep and 0.66 in. diameter well
- Flat field collimator meets ANSI N44.3, IAEA
- Precision measurement and alignment rod, which measures distance directly to thyroid

Well Counter

- 2 in. diameter NaI(Tl) well detector with 1.55 in. deep and 0.66 in. diameter well
- 1 in. lead well shield with brass liner
- (Optional 2 in. shield available)

Multichannel Analyzer Interface PC Board

- Two detector inputs
- 1024 Channels
- Maximum count rate: 200,000 cps at 5%
- Count Rate Linearity: Within 2% up to 150,000 cps
- ROIs automatic or manual
- Differential Linearity <2% over the top 98% of channels
- Integral Linearity <1% over the top 98% of channels
- Presets live time, real time, total counts
- Automatic peak finding
- Software controlled lower level discriminator

Thyroid Uptake Stand Dimensions

- Closed Storage Position: 56 x 28 x 32 in. (142 x 71 x 81 cm) (H x W x D)
- Arm able to extend 36 in. (91 cm) horizontally beyond shelf
- Vertical travel 25 to 63 in. (64 to 160 cm)
- Weight: Uptake System: 340 lb (154 kg)
- Weight with 1 in. Shielded Well: 410 lb (186 kg)
- Weight with 2 in. Shielded Well: 540 lb (245 kg)

ORDERING INFORMATION

- Captus 4000e Thyroid Uptake System: Item #5430-30151
- Captus 4000e Thyroid Uptake System with Well: Item #5430-30152
- Captus 4000e Thyroid Uptake and Well Counting System with 2 in. Well Shielding: Item #5430-30154
- Captus 4000e DICOM Interface: Item #5430-00007
- Neck Phantom: Item #5230-0038
- Well Detector (2 in. Shield): Item #5420-2164
- Rod Source Holder: Item #7315-1850

