



**NUC**

SIMPLE NUCLEAR PACS INTEGRATION

**IT'S TIME  
FOR A  
CHANGE**

**SYSTEM REQUIREMENTS**

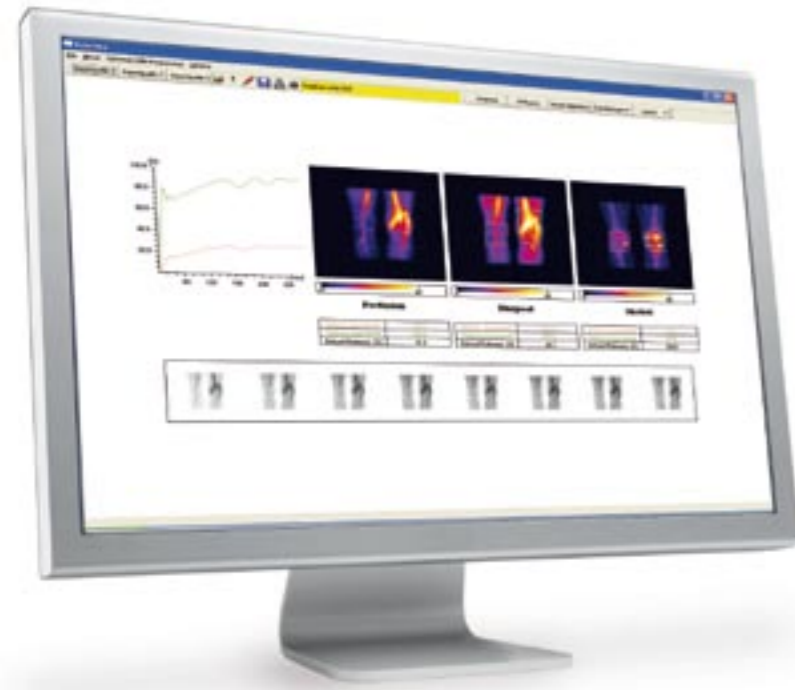
	MINIMUM	RECOMMENDED
<b>Operating System:</b>	Windows 2000, XP	Windows XP Professional
<b>Software:</b>	iQ-VIEW®	iQ-VIEW® PRO
<b>CPU:</b>	Pentium 1 GHz	Pentium 1,5 GHz
<b>Memory:</b>	512 MB RAM	1 GB RAM
<b>Graphics:</b>	16 bit color output 1024x768 pixel or more	24 bit color output 1280x1024 pixel or more
<b>Harddisk</b>	40 GB of empty hard disc space	120 GB fast local hard disc space
<b>Network:</b>		100 Mbit network adapter
<b>Peripherals:</b>		PostScript printer Scroll wheel mouse CD or DVD writer
<b>Hardware:</b>		Dell hardware

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**OUR SOLUTIONS FOR YOUR IMAGING NEEDS**

- iQ-VIEW®** The radiology reading station
- iQ-VIEW® 3D** 3D post-processing workstation
- iQ-CAPTURE** Add-on hardware module for capturing images from analog video sources
- iQ-WEBX** DICOM server for storage, teleradiology and image distribution
- iQ-HIS/RIS CLIENT** Simplifying the workflow
- iQ-PRINT** DICOM paper print server
- iQ-ROBOT** Automatic burning and labeling of patient CDs and DVDs
- iQ-ROUTER** Image compression for teleradiology and workflow management
- iQ-WORKLIST** DICOM worklist server optimizing your workflow
- iQ-NUC** Simple nuclear PACS integration
- iQ-RIS** The RIS that simplifies your work
- iQ-DISPLAYS** Medical diagnostic monitors
- iQ-CR ACE** Efficiency in CR
- DICOMReader** Read any DICOM CD into your PACS
- OrthoView™** Add-on module for orthopedic templating and trauma planning





# THE iQ-NUC SOFTWARE FAMILY HAS BEEN DEVELOPED

... to make processing of nuclear image data independent from any camera vendor.

It includes easy-to-use tools for the heart, thyroid, kidney and bone. Furthermore, the module provides the opportunity to check if your gamma camera meets the requirements of the quality standards for quality control purposes.\*

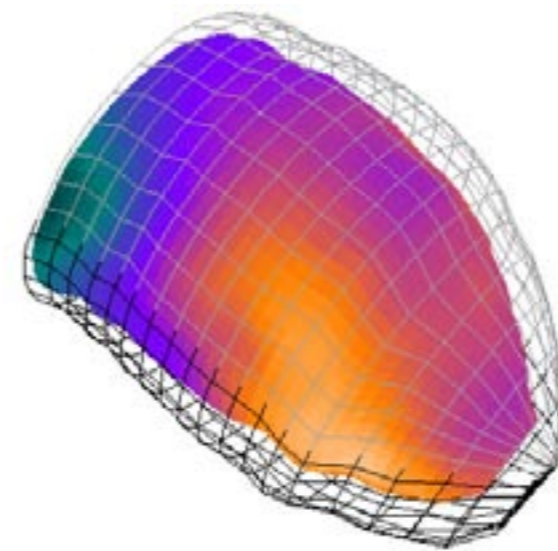
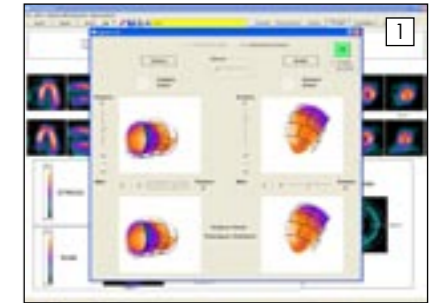
By using iQ-NUC you can become independent from your usual working environment. You can do your nuclear image reconstruction based on the original image data wherever is convenient for you – at work or at home, using your laptop or PC. All our iQ products are developed for Microsoft Windows® operating systems and can

therefore be easily integrated into your computer. Of course, you may customize the results screen according to your needs and make use of the integrated print function.

The results given by the software are based on scientifically validated algorithms. You may view them as individual images, 3D representations or animated sequences. Compared to a plain image print, iQ-NUC gives you a great advantage as the toolset allows you to use all the additional information provided in the cine and extended data. Usually, the reconstruction process only takes a few seconds.

1 The iQ-MYO module serves for the analysis of SPECT Myocardial Perfusion Studies. It is possible to use all common tracers (TI-201, MIBI Tc-99m, Myoview) as well as normal or gated studies. Studies may have been carried out using a one-day or a two-day protocol. An automatic reconstruction and reorientation algorithm as well as a unique 3D filtered back projection guarantees a fast and reliable result.

2 iQ-THYROID can be used to calculate the thyroid uptake and the therapy dose of radioiodine therapy.

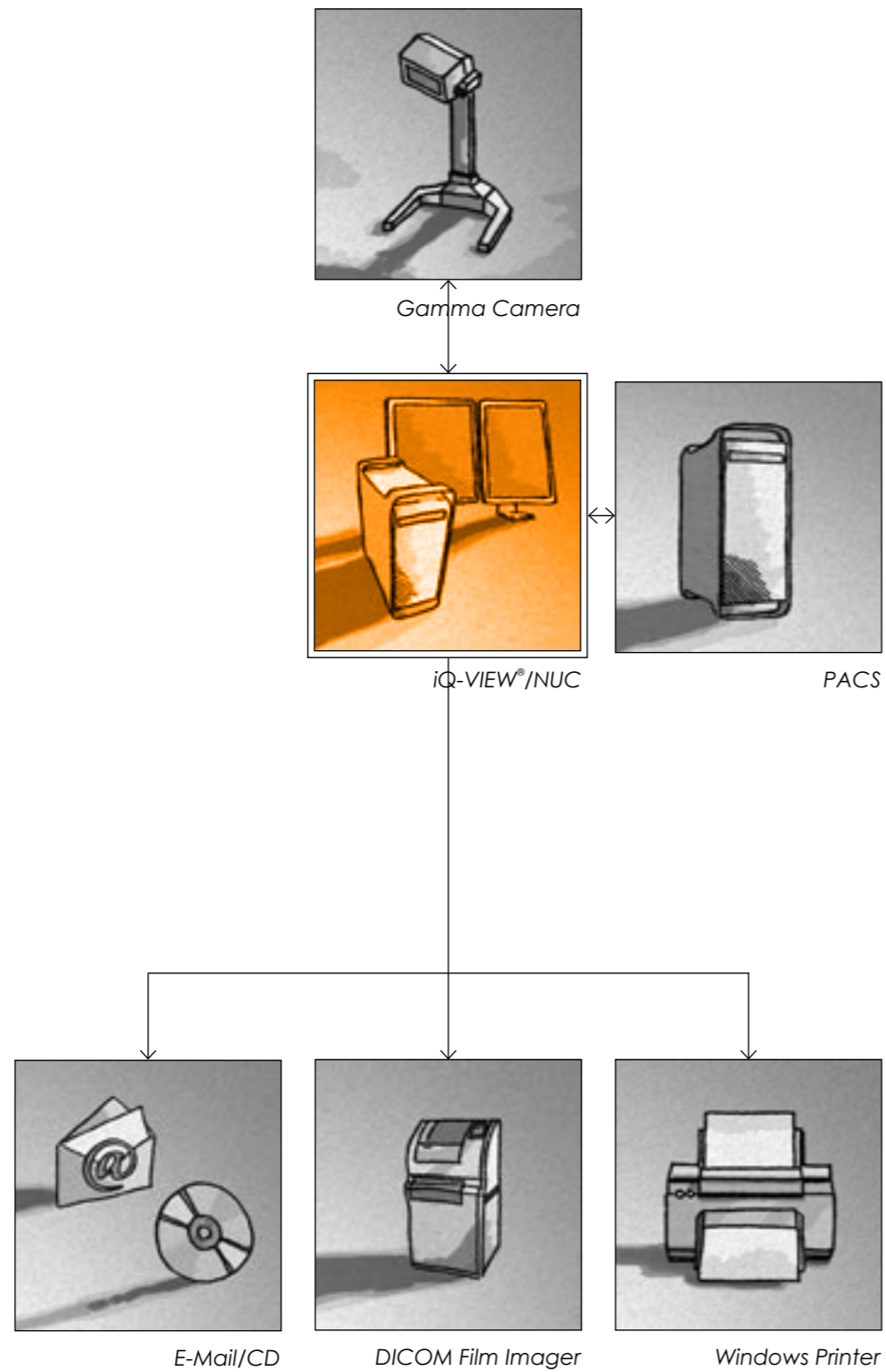


When developing our products we put special emphasis on high user-friendliness, low use of system resources and software stability. All basic functions are easy to learn and use.

For iQ-NUC you do not need to buy new and expensive hardware. Simply keep using the hardware you normally work with. Our software enables you to retrieve studies from existing archives and easily integrate the obtained data into your local PACS. The DICOM 3.0 standard guarantees maximum compatibility at any time.

\* Quality requirements according to the standards IEC 789 and NEMA NU-2002

iQ-VIEW®/NUC can be connected directly with your gamma camera and your PACS to postprocess your cardiac scans. Calculated result images can be burned to CD, stored to PACS or printed.



1 The iQ-KIDNEY module allows users to calculate the kidney clearance according to Bubeck.

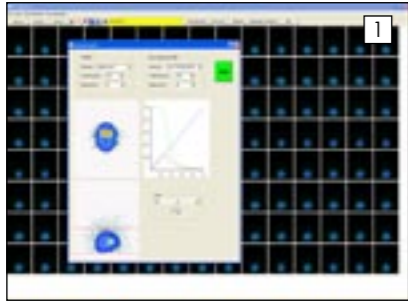


2 The iQ-BONE module offers features for the reconstruction and display of ECT bone studies like Maximum Intensity Projections and the display of whole-body images.



3 The iQ-BONE PLANAR module has been developed to process planar bone scans.





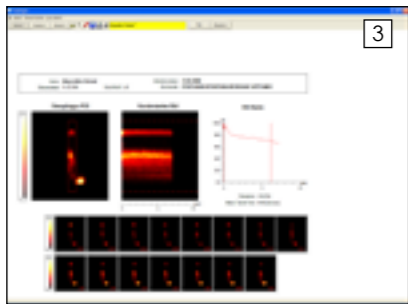
1 iQ-BRAIN will be used to analyze DATScan SPECT studies using cocaine analogues as radiopharmaceuticals to study in vivo via the striatal uptake the structural and biochemical integrity of the presynaptic dopaminergic nerve terminals in order to diagnose Parkinson's disease.

The module complies with the guidelines specified by the European Association of Nuclear Medicine (EANM).

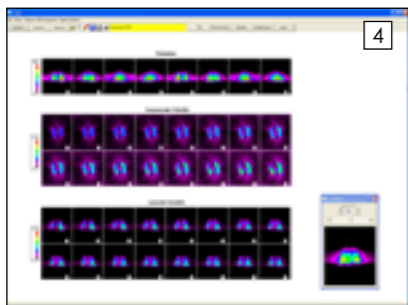


2 The iQ-UNIFORMITY module enables users to control the quality of a gamma camera in order to meet IEC 789, EN 60789 and NEMA NU 1-2001 requirements.

3 iQ-ESOPHAGUS is an easy to use tool to measure the esophageal motility.



4 iQ-LUNG serves for processing lung ventilation and perfusion studies.



## iQ-NUC FEATURES

### GENERAL

- Flexible local database
- Modification of contrast
- Annotation
- Windows Print

### SUPPORTED FILE FORMATS

- DICOM
- Interfile
- Proprietary formats of gamma camera manufacturers on request

### SUPPORTED DICOM FEATURES

- DICOM 3.0 conform
- Store to PACS
- Query/Retrieve
- DICOM Print using iQ-VIEW®

### MODULES

- MYO - Evaluation of ECT myocardial perfusion studies. The module includes automatic detection of the heart axis, reconstruction process, cross section planes, quantitative comparisons with normal values, Bulls Eye output and calculation of the ejection fraction.
- BONE (in preparation) - Evaluation of ECT bone studies, particularly of the skeleton. It includes reconstructions, cross section planes, maximum intensity projections and whole body outputs.
- BONE PLANAR (in preparation) - Output of bone and other single frame images incl. assessment of 3-phase bone scintigraphy
- KIDNEY (in preparation) - Calculation of the renal clearance based on a dynamic study with Tc99m-MAG3 (according to Bubeck)
- THYROID (in preparation) - Calculation of the thyroid iodine uptake based on a planar thyroid image, calculation of the therapy dose based on a sequence of images from a radioiodine test
- UNIFORMITY (in preparation) - Calculation of the integral and differential homogeneity of a gamma camera for a quality control according to IEC 789 and NEMA NU-2002
- ESOPHAGUS (in preparation) - Calculation of the esophageal clearance based upon the radionuclide esophageal transit time. The result presentation includes a ROI curve, a condensed image and a sequence presentation.
- LUNG (in preparation) - Processing of planar and dynamic lung perfusion studies. This module provides you with a flexible and customizable slice presentation as well as the count calculation results for the lung segments.
- BRAIN (in preparation) - Analysis of brain DAT scan SPECT studies according to the EANM guidelines to diagnose Parkinson's disease.

### SOFTWARE

- 30 day trial version
- Activation by software key

### CERTIFICATION

- In preparation for CE class IIb