AutoQA Plus Software for QRM Multi-Energy QA Phantom

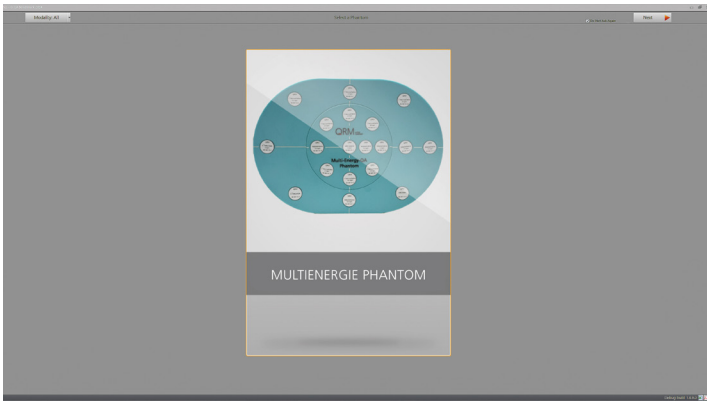
THE DOSIMETRY COMPANY

An automated analysis software for the QC of different spectral CT technologies performed with the QRM Multi-Energy QA Phantom

- Automated image processing software for multi-/dual-energy or photon counting CT protocols performed with the QRM Multi-Energy QA Phantom
- Automatic evaluation of the mean VOI (Volume of Interest) and the measured SD (Standard Deviation)
- Installed locally on the computer

AutoQA Plus is an automated image quality software designed to provide repeatability and accuracy by reducing operator error during image quality tests of various spectral CT technologies from different manufacturers performed with the QRM Multi-Energy QA Phantom.

After positioning the QRM Multi-Energy QA phantom in the isocenter using the internal alignment lasers at the 0^0 position of the gantry, it is scanned using multi-energy, dual-energy, or photon-counting CT protocols. Image quality parameters are automatically evaluated by AutoQA Plus.



Specifications

- Report Profile Manager, real-time report controlling option
- Pass/Fail performance assessment
- Users can create report profiles to control pass/fail thresholds, output of images, overlays, and graphs
- Reports available in HTML, PDF, and JSON formats
- Instant trend analysis using "Trend Report Links"
- Exportable trend analysis, graphs, and tables to MS Excel
- Multi-language support
- User manual

Ordering Information

- L999222 AutoQA Plus SW for imaging phantoms
- L999223 AutoQA Plus SW for QRM phantoms
- L999225 AutoQA Plus SW, upgrade to L999223

Operating System

- Windows®11 4GB memory

Image Quality Parameters Evaluated by Phantom

- Relative electron density (Rho) and mean effective atomic number (Z_{eff})
- Material decomposition with graphical representation at low vs high energy of 26 inserts representing different materials at different concentrations
- Iodine / calcium separation
- Virtual mono-energetic images
- Virtual non-contrast (VNC) images

Application

- Once the phantom images have been acquired using spectral CT protocols, and the post-processing has been completed on the manufacturer's main computer or workstation, the dicom data is uploaded to AutoQA Plus for quality control analysis.
- The software detects the inserts with different concentrations and materials and places the VOI (Volume of Interest)
- The following parameters are measured and displayed on the "Trend Report Links"
  - The mean VOI (Volume of Interest) and the measured SD (Standard Deviation) of the CT numbers
  - Iodine concentration maps between measured and nominal insert (calibrated insert) values

Specifications	Basic License	Full License (L999223)
Phantoms supported	ME	ME
Embedded DICOM SCP	✓	✓
Trend Analysis	✗	✓
Excel export	✗	✓
Processed reports import/export	✗	✓
Custom Excel export report builder*	✗	✓
ME phantom automated image selection	✗	✓

* New Feature v1.8.9.0

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