NeuViz
Computed Tomography

128

Neusoft® Medical Systems

128

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Pressured to do more with less?

The NeuViz 128, the latest advance in Neusoft CT innovation, provides remarkable clarity and precision to expand the range of services you can provide while reducing operational costs.

Full-featured, low-dose, workflow optimized and designed with patient comfort in mind, the NeuViz 128 is the CT choice you've been missing.

- Comprehensive Low-Dose Design
- ClearView Iterative Reconstruction
- Robust Cardiac Imaging
- Quad Sampling
- Micro-STAR Detector
- Metal Artifact Reduction
- Patient-Centric Design
- User-friendly Workflow
- World Class Service & Support

128 Comprehensive Low-Dose Design

New Detector Design
Modular design delivers excellent x-ray conversion efficiency, enhancing low-dose imaging.

240° Exposure
Dose to the patient and attending physician is reduced.

Organ Safe
Reduces dose to radiosensitive organs — eyes, thyroid and breasts.

Pediatric Protocols
Protocols are designed specifically for pediatric anatomy.

ClearView
Iterative processing in projection and image spaces delivers dose reduction.

Dose Check
Fully implemented Dose Check ensures that a patient cannot be over radiated.

3D-Dose Modulation
Tube current is modulated based on the anatomy in the scan field to deliver an anatomically optimized dose.

ECG-Dose Modulation
Reduces tube current during non-imaging phases of the cardiac cycle to minimize patient dose.

ClearView Iterative Reconstruction

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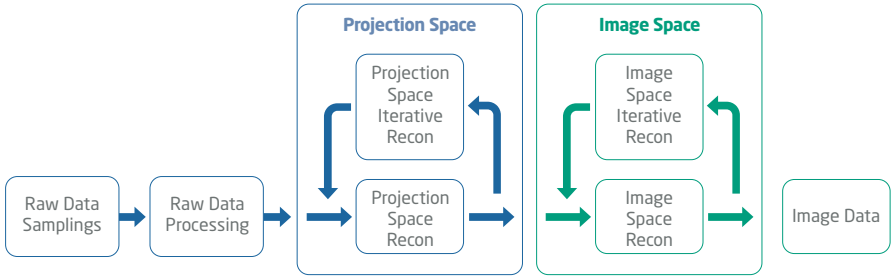
Clinical Benefit: ClearView transforms noisy, low-dose images into high-quality studies that deliver improved diagnostic capacity.

BRAIN SCAN: Dose - *38.1 mGy*

CHEST SCAN: Dose - *1.5 mGy*

ABDOMEN SCAN: Dose - *9.6 mGy*

By performing iterative image processing operations in both projection and image space, the noise and artifact that often accompany low dose acquisition can be removed. This is done without a reduction in image detail.



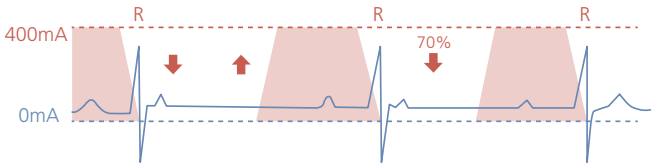
ClearView Operational Schematic

Customers enjoy superior image quality at a lower dose than that of older CT systems.

128 Robust Cardiac Imaging

By reducing the tube current during periods of the cardiac cycle when image data is not being acquired, patient dose can be significantly reduced.

Clinical Benefits:
The NeuViz 128 provides superior coronary artery visualization. Reduced kV cardiac scanning lowers patient dose. Adaptive multi-segment reconstruction improves temporal resolution for difficult cardiac rhythms.



Quad Sampling Technology

By dynamically moving the focal spot axially and longitudinally, sampling density is increased 400%. This allows for improved resolution, reduced artifact and extended scanning ranges.

Micro-STAR Detector

iHD (isotropic High Definition) enables the half-slice acquisition, which delivers 24 lp/cm isotropic resolution.

Metal Artifact Reduction

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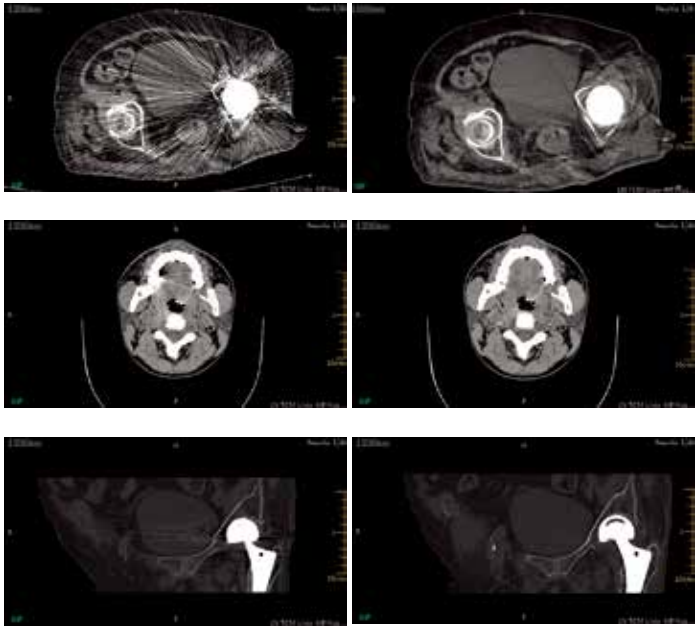
Effective integration of high resolution hardware and software results in superior image and diagnostic quality.

WITHOUT MAR+ **WITH MAR+**



128 Patient-Centric Features

Patient comfort is enhanced with supportive table padding and easily accessible emergency release controls.

A child-friendly digital display improves the scanning experience for pediatric patients.

The new scanner design delivers important information to the patient and the clinician.

Overall study times are reduced for patients by streamlined workflow and advanced scanning technology.

Full Functionality with Intuitive Workflow 128

The newly designed user interface improves clinician efficiency by guiding the user effortlessly through the examination.

- **Gantry LCD Monitor:** The integrated display panel and illuminated ring on the gantry provide real-time information on scan status.
- **Control Panels:** The bold new design of the control panels includes larger knobs which are easier to operate.
- **Control Box:** Ergonomic design for easier operation for improved workflow.
- **User interface** guides the healthcare provider through the study using a "guided tool bar."
- **High-speed data acquisition and transmission** increases patient throughput.

Quick, easy-to-use post processing and diagnostic software applications.

- MPR/CMPR, 3D/SSD, MIP/MinIP/AIP/VE/VR
- SAS on supported injectors, Bolus Tracking
- Networking 100/1000 Mbps
- Auto Voice and Film
- Volume Calculation
- Vessel Analysis
- ClearView IR
- Calcium Scoring
- Bone Removal
- Neuro DSA
- ECG Gating
- Dental Analysis*
- Brain/Body Perfusion*
- Lung Density and 3D Lung Nodule Analysis*
- Coronary Artery and Cardiac Function Analysis*
- Neusoft Virtual Colonoscopy*
- Tumor Evaluation*
- CCT*
- Retrospective and Prospective Cardiac Imaging
- Organ Safe
- Quad-Sampling
- Pediatric Protocols
- Adaptive Multi-Segment Reconstruction
- Improved, Intuitive User Interface

* may be optional

128 Technical Specifications

SPECIFICATIONS	NeuViz 128
Minimum room size scan & operator combined	285 sq/ft
Minimum ceiling height	6′ 7″
Gantry dimension (L x W x H)	7′ 2″x 3′ 1″x 6′ 3″
Main power requirement	100 KVa
Aperture	72cm
Scan field	50cm
Tilt	plus/minus 30°
Rotation times	.374s, .5s, .6s, .8s, 1.0s, 1.5s, 2.0s
Partial rotation times	0.25s, 0.32s, 0.39s, 0.52s, 0.65s, 0.97s, 1.29s
Temporal resolution	62.3ms
Focus-to-isocenter distance	570mm
Focus-to-detector distance	1040mm
Detectors	64
Slices	128
Number of detector elements	672 x 64
Total channels per slice	1344
Number of projections	4640
Sequence acquisition modes	128 x .625, 64 x .625, 32 x .625, 16 x .625, 8 x .625, 4 x .625, 2 x .625
Spiral acquisition modes	128 x .625, 64 x .625, 32 x .625, 16 x .625
Detectors	99.9% x-ray conversion efficiency, afterglow <= 2 us
X-ray tube	CTR2280
Tube current range	30mA～667 mA
Voltage	80,100,120,140 kV
Heat storage	8.0 Mhu
Cooling rate	931 KHU/min
Focal spot (mm)	0.6×1.2 (Small); 1.1×1.2 (Large)
Filter	Al Equivalent Tube: 1.5mm Al
Beam-limiting device	Equivalent to 6.68mm Al
Generator	80KW

SPECIFICATIONS	NeuViz 128
Maximum table load	204.12kg/450 lb standard; 299.3kg/660 lb optional
Table feed speed	1mm/s-160mm/s
Verticle table/travel range	430mm-970mm
Verticle travel speed	9 mm/s-15 mm/s
Scannable range	1770mm
Host computer	Intel DUAL Core Xenon processor technology; 2.40 Ghz
Display	1,280 x 1,024 resolution
Image storage	500 GB; 960,000 uncompressed images
Additional storage	CD-R, DVD, USB drive
Scout length	50-1650mm
Scan times	0.5-16.5s
Scout views	AP, Lateral, Dual
Axial reconstucted slice thicknesses	0.625, 1.25, 2.5, 5, 10mm
Dynamic multi-scan	Multiple continuous scans without table movement
Spiral acquisition reconstruction slice thicknesses	0.625, 0.8, 1, 1.25, 1.5, 2, 2.5, 3, 4, 5, 6, 7, 8, 9, 10mm
Slice increment	0.1-2 mm
Maximum scan time	100 seconds
Scan length	1650mm
Pitch	0.13-1.5
Real-time display	Yes
Scan field	50cm
Recon field	5-50cm
Recon matrices	512x512, 768x768, 1024x1024
HU scale	-32,768 to +32,767
Recon speed	40 images/second
Cine display rate	30 images/sec
Full DICOM support	Yes
Low-contrast resolution	4mm @ 3HU; 19.8 mGy
High-contrast resolution	0%MTF 17lp/cm

North America | Sales | Service | Support

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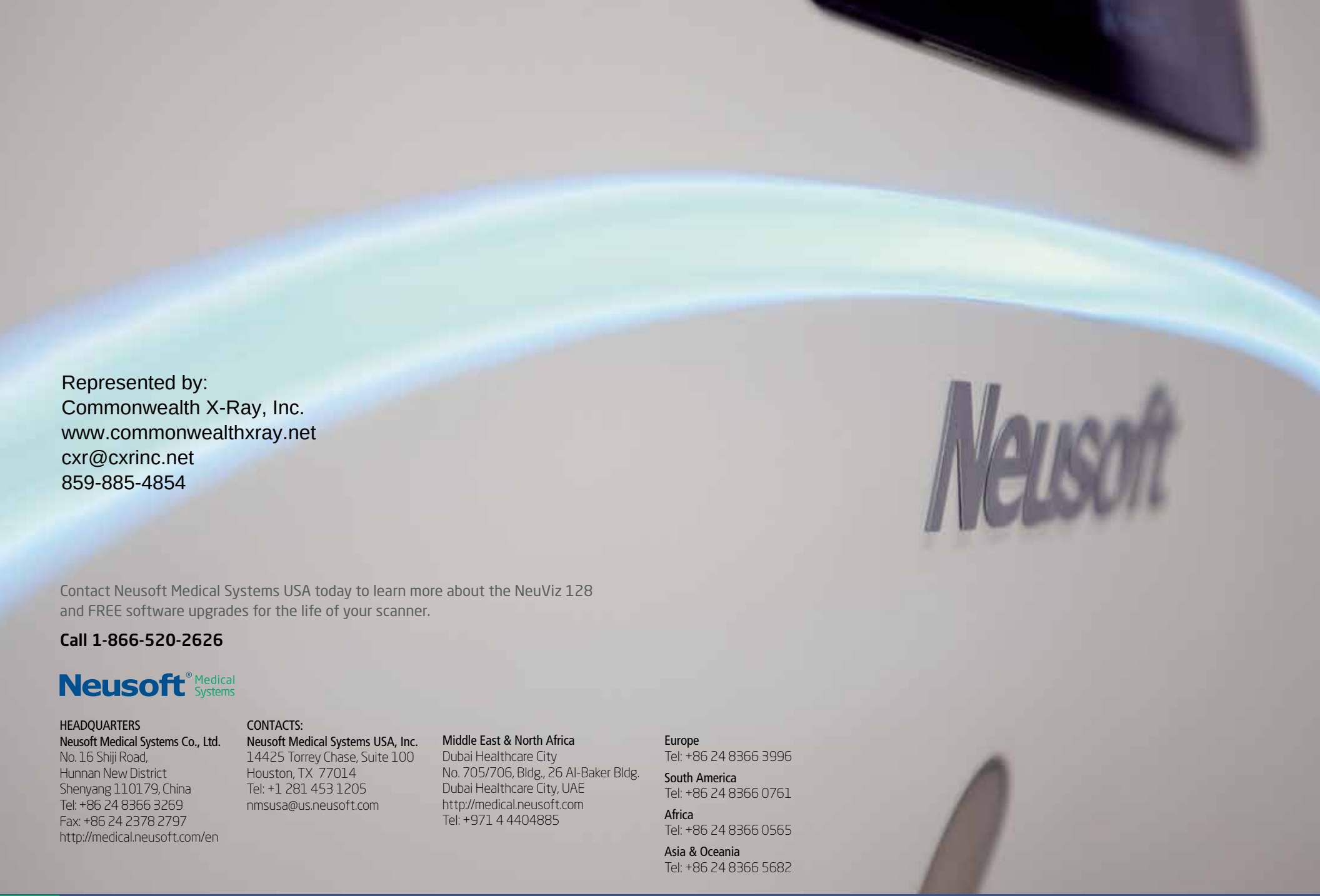
Neusoft Medical Systems USA is aligned with the most reputable medical equipment distribution partners in the USA so that you can learn about Neusoft advantages from a trusted adviser.

Remote diagnostic capabilities and North America-based service engineers bring expertise to you immediately, and proactively detect issues before problems can cause downtime and patient inconvenience.

Our North American parts depots, supported by a global logistics network, are ready to promptly respond to your service needs.



Represented by:
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Contact Neusoft Medical Systems USA today to learn more about the NeuViz 128 and FREE software upgrades for the life of your scanner.

Call 1-866-520-2626

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