



<b>NAME OF PRODUCT</b>		<b>GE REVOLUTION FRONTIER (256slice, GSI Spectral Imaging)</b>
<b>BRAND / MANUFACTURER</b>	<b>GE HEALTHCARE</b>	
<b>CT MODEL / TYPE</b>	REVOLUTION FRONTIER	
<b>PRODUCT'S REGISTRATION (AKL)</b>	AKL 21501815612	
<b>FDA Approval</b>	Yes	
<b>WHERE MARKETED</b>	Worldwide	
<b>GANTRY SYSTEM &amp; PERFORMANCE:</b>		
Gantry Aperture	700 mm	
Rotation Time for full 360°	0.35 second	
Power requirements	150 kVA	
<b>DETECTOR &amp; DATA ACQUISITION:</b>		
Detector coverage	40 mm	
Detector rows	64 rows	
Slice per rotation	128 projection slice/rotation	
Slice per rotation in spectral imaging	256 slice/rotation for spectral imaging	
Slice thickness	0.625mm	
Axial extended acquisition coverage	80 mm	
Dynamic 4D extended acquisition coverage	312.5 mm	
<b>LOW DOSE FEATURES &amp; IMAGE QUALITY:</b>		
Lowest mA selection	10 mA	
Iterative reconstruction	ASiR-V	
Iterative Reconstruction % Dose reduction	82% Lower Dose Reduction	
Spatial Resolution	0.23 mm	
High contrast Spatial Resolution (0% MTF)	21.4 lp/cm	
Reconstruction Matrix	1024x1024, 512 x 512	
Display Matrix	1024x1024	
3D Dose modulation	Auto mA / Smart mA. Volumetric knowledge to personalize protocols and optimize dose for every patient	
Dose Modulation for superficial anterior organs	Organ Dose Modulation. ODM provides reduction of radiation dose for superficial organs	
Metal artifact reduction caused by metallic implant	Smart MAR GSI Metal Artifact Reduction	
<b>TUBE &amp; GENERATOR:</b>		
Dual Energy CT Technology	Gemstone Spectral Imaging Pro	
CT Generator max power	100 kW in Single Energy 107 kW in Dual Energy	
Tube Assembly Heat content	11.5MHU	
Anode Heat capacity	8 MHU	
Anode Heat dissipation	2100 kHU/min (2.1 MHU/min)	
Tube Focal Spot	3 Focal spot. Small, Large, GSI	
kV Selection	80 kV - 140 kV	
mA range	10 mA - 835 mA	
<b>PATIENT TABLE:</b>		
Vertical Range	430 mm - 991 mm	
Horizontal Scannable range	1700 mm	
Horizontal speed	175 mm/sec	
Max load capacity	227 kg	
<b>SPECTRAL IMAGING PERFORMANCE</b>		

Dual Energy & Spectral CT Technology	Rapid kVp switching GSI Pro + Gemstone Clarity Detector
Temporal registration for DE acquisition	165 times faster than other dual energy technology.
Material Decomposition Domain	Projection space
Spectral imaging Field of View	50 cm
Spectral Imaging Viewer	GSI Viewer viewer. Allows the user to scroll among the full spectra of kV energies to visually confirm the ideal energy that frames the desired anatomy density of interest
Spectral Imaging Viewer	GSI Viewer - Allows the user to scroll among the full spectra of kV energies to visually confirm the ideal energy that frames the desired anatomy density of interest
Virtual Monochromatic Energy	Yes. Ability to generate virtual monochromatic images as if they were imaged with a theoretical monochromatic beam
Monochromatic Energy Range	40 keV to 140 keV
Material Density Images (MD)	Ability to performs material decomposition to natively reconstruct the material density (MD) images (such as iodine, water, calcium)
Virtual Unenhanced Images (VUE) or Virtual Non Contrast (VNC)	Ability to generate virtual un-enhanced images (VUE) or virtual non contrast by subtracting iodine from images, producing iodine-suppressed images.
Dual Energy MAR	Metal Artifact Reduction to reveal anatomic details obscured by metal artifacts
Effective Z (effective atomic number)	Capability to generate effective atomic number (Effective Z), which is a descriptor of density and atomic number of a material, which can be used to differentiate materials
Kidney stone characterization	Capability to provides information of the chemical composition of renal calculi by calculation and graphical display of the spectrum of effective atomic number
Spectral Cardiac	GSI Cardiac
Cardiac spectral imaging	Spectral Imaging in prospectively gated Cardiac Imaging
<b>CARDIAC &amp; 4D IMAGING PERFORMANCE</b>	
Cardiac Acquisition	5-beats
Coronary Motion artifact correction	SnapShotFreeze
Low Dose Cardiac Scan	SnapShot Pulse
Cardiac prospective gating	Provided
Retrospective helical ECG-gated cardiac	Provided
Cardiac Temporal resolution	44 msec
Effective Cardiac temporal resolution	29 ms with SSF
Equivalent gantry rotation speed	0.058 sec with SSF
Cardiac ECG monitor	Provided
Extended Axial scan	Volume Shuttle
Coverage for extended Neuro Perfusion	80 mm Volume Shuttle
Extended bi-directional scan	Volume Helical Shuttle
Coverage for extended bi-directional scan	140 mm Volume Helical Shuttle
Coverage for extended CT 4D	312.5 mm Volume Helical Shuttle
4D CT slice equivalent	500 slice equivalent
<b>PC CONSOLE</b>	
Processor	Dual Intel Xeon Gold
RAM	96 GB DDR4
Monitor display	2 x Color LCD Monitor
Reconstruction Speed	62 images per second
DICOM support	Supported
HIS/RIS & PACS support	Supported
<b>PC POST PROCESSING WORKSTATION</b>	
Workstation	GE AW Volumeshare
Monitor display	2 x Color LCD Monitors
RAM	32 GB
Disk	1280 GB
<b>POST PROCESSING SOFTWARE:</b>	
Post Processing Workstation	AW VolumeShare7
2D & 3D Viewer, Volume Rendering, Flythrou	Volume viewer
3D Viewer with natural light	Volume Illumination
3D Print support	3D Suite
Image fusion from different modalities	Integrated Registration
CT Angiography, Advance Vessel Analysis	VesselIQ Xpress
Automatic Bone removal	AutoBone Xpress
CT Cardiac Analysis	CardIQ Xpress
CT Cardiac Functional Analysis	CardIQ Function Xpress
CT Cardiac Electrophysiology	CardEP
CT Calcium Score	SmartScore
CT Neuro/Head Perfusion	Perfusion 4D Neuro
CT Body / Organ Perfusion	Perfusion 4D Multi Organ
CT Colonoscopy with dissection	CT Colon Pro with Electronic Cleansing
CT Lung Nodule Analysis	Lung VCAR with Digital Contrast Agent
CT Thoracic analysis	Thoracic VCAR
CT Dental Analysis	Dentascan

CT Liver Analysis	Hepatic VCAR
CT Spine Identification & Labeling	Bone VCAR. Automated spine identification and labeling based on a deep learning model
CT Stroke Analysis - Acute / ischemic	Fast Stroke. Analysis of stroke patients to display vasculature of the head and neck at different time points of all phases from multiphase CTA (mCTA)
CT Stroke Analysis - Hematoma & Aneurysm	Stroke VCAR. Fast hematoma and aneurysm analysis, segmentation, quantification and analysis for pre procedure planning
CT 4D imaging	Dynamic shuttle
Extended Axial scan	Volume Shuttle
Extended bi-directional scan	Volume Helical Shuttle
TAVI - Aorta Valve pre-procedure planning	TAVI Analysis
<b>SITE REQUIREMENTS &amp; ACCESSORIES:</b>	
Warranties	5 Years main unit full coverage (labor + GE parts)
Room size for CT Scan	As BAPETEN regulation
Shielding	As BAPETEN regulation
ECG patient cardiac monitor	Provided
UPS for PC	Provided
UPS Full System	Provided
Injector Dual head	Provided
Report Paper printer	Provided
DICOM Film Printer	Provided