

REQUESTING SERVICE IMAGING SERVICE(115)
SHIP TO:
VA MEDICAL CENTER B89013
V.A. Medical Center
1111 East End Boulevard
WILKES-BARRE, PA 18711

P.O.# 693-B89013

<u>QTY</u>	<u>DESCRIPTION</u>
1	[OC] AQUILION ONE GENESIS EDITION HIGH CAPACITY EXTENDED COUCH (/6)
1	AQUILION ONE GENESIS EDITION EXTENDED HIGH CAPACITY COUCH
1	ACCESSORY KIT FOR HIGH CAPACITY COUCH
1	DICOM 3 MODALITY WORKLIST MANAGEMENT (MWM) SERVICE CLASS USER (SCU) SYSTEM
1	DICOM 3 QUERY/RETRIEVE SCP
1	DICOM 3 QUERY/RETRIEVE SCU AQ/MP
1	DICOM 3 STORAGE COMMITMENT SCU SOFTWARE
1	PRESENTATION OF GROUPED PROCEDURES (PGP) AND EXAM HARD SPLIT
1	CT PHANTOM
2	MULTIFUNCTION TASK CHAIR WITH ARMS
1	CONSOLE DESK 65" X 36" X 30"
5	MEDIA,DVD-RAM DRIVE (9.4 GB)
1	NON-CORROSIVE FLOOR LEVELING EPOXY KIT
1	GENESIS DISPLAY CONSOLE UPGRADE KIT
1	REAR GANTRY PANEL KIT
1	POWER DISTRIBUTION UNIT FOR GENESIS
1	VARIABLE HELICAL PITCH (PRE V6-REQUIRES SURECARDIO ECG GATING)
1	TECH ASSIST LATERAL TABLE SLIDE FOR AQUILION ONE GENESIS SERIES
1	LATERAL COUCH MOVEMENT KIT
1	INJECTOR SYNCHRONIZATION FOR AQUILION ONE GENESIS EDITION
1	INJECTOR SYNCHRONIZATION SOFTWARE CAN PROTOCOL
1	SURECARDIO WITH PHASEXACT FOR AQUILION ONE GENESIS EDITION
1	ECG GATING SCANNING SYSTEM

<u>QTY</u>	<u>DESCRIPTION</u>
1	STAND,ECG UNIT (MODEL-7800)
1	ECG MONITOR, R WAVE CARDIAC TRIGGER 7800T
1	ADVANCED AQUILION ONE / PREMIUM CARDIAC CT COURSE FOR TECHNOLOGISTS
1	ARM HOLDER (ONE SIDE)
1	HANDLE, TABLE, OVERHEAD
1	COLOR PRINTER INTERFACE FOR NETWORK PRINTERS
1	DICOM 3 STORAGE SERVICE CLASS PROVIDER (SCP)
1	DICOM 3 PERFORMED PROCEDURE STEP SCU
1	SURECARDIO SCORING ON CONSOLE (REQUIRES ECG OPTION)
1	ADDITIONAL ON-SITE APPLICATIONS TRAINING - 32 HOURS
1	CT AQ ONE GENESIS BIOMED TRAINING COURSE - TUITION ONLY (10 DAYS)

OPTIONS:

<u>QTY</u>	<u>DESCRIPTION</u>
1	SYSTEM UPS 125 KVA 480 VOLT INPUT / 480 VOLT OUTPUT FOR GENESIS **REQUIRES AQ/PDU/G**
1	MAINTENANCE BYPASS 3 PHASES 250A
1	CONSOLE UPS FOR AQUILION ONE GENESIS
1	REMOTE CONTROL PANEL RMC- 2010 FOR WESEMANN UPS U10K WITH CABLES
1	AREA FINDER KIT FOR AQUILION ONE GENESIS SERIES
1	AQUILION SURESUBTRACTION KIT WITH SURESUBTRACTION SCAN (CHSS-001A)
1	SURESUBTRACTION (ORBITAL SYNC)
1	SURESUBTRACTION LUNG (RECOMMEND CHSS-001A SURESUBTRACTION SCANNING)
1	SUREFLUORO: CT FLUORO KIT GENESIS SERIES WITH FLAT-PANEL MONITOR
1	CEILING SUSPENSION MOUNT FOR LCD MONITOR
1	MAVIG 360 COLUMN - FIXED (58 CM)
1	4-D NEURO PERFUSION PACKAGE WITH SURESUBTRACTION FOR AQUILION ONE CONSOLE
1	PATIENT OBSERVATION SYSTEM WITH COLOR CAMERA AND LCD MONITOR

The Aquilion ONE 320 Series G is a 160 row multi-detector, multi-functional CT scanner that has the ability to provide up to 320*¹ slices with speeds as fast as 0.35 (0.275*²) seconds per a rotation. The systems low energy requirement (125 kVA) and new PUREVision Optics, combined with Adaptive Iterative Dose Reduction 3D Enhanced (AIDR 3D Enhanced) and PURE Vision detector, provides excellent image quality while maintaining a smaller foot print, leaving more room for the technologists to work. Furthermore, the Aquilion ONE 320 Series G provides a scalable solution that can provide in-field upgrades and grow with your clinical requirements.

**¹- Using Canon Medical Systems' Double Slice technology.*

**²- Requires Fast Scan and X-ray Power Upgrade Kit (A320G/FAST)*

The system's advanced imaging capabilities allow you to perform a wider range of procedures with greater comfort, convenience and safety while increasing efficiency and productivity every step of the way. The speed and clinical accuracy of this technology offers significant benefits to patients – especially trauma, pediatric and critically ill patients. This technology supports fast data acquisition and transfer times to aide physicians to more clearly visualize internal injuries and disease in less time.

Aquilion ONE 320 Series G includes PUREViSION Optics and 0.5 mm PUREVISION Detector that provides an improved and more homogenous x ray spectrum and better light output for an overall more efficient imaging chain.

PUREVision Optics provides a better balance between image quality and dose, thus improving dose reduction and low contrast detectability (LCD)*¹

Body CT

- Up to 31% Dose reduction at equivalent LCD*²
- Up to 18% improved LCD at equivalent dose*²

Brain CT

- Up 22% improved LCD at equivalent dose*²

**¹- A non-prewhitening model observer study was conducted comparing ONE / GENESIS Edition to the Aquilion ONE. Dose reduction values were established by comparing low contrast detectability under baseline conditions for abdominal and brain examination*

**²- Based on the detectability index performed metric, a measure of signal to noise that takes into account the magnitude and texture of both the signal and the noise for a given LCD task.*

It acquires up to 8 cm volumes of the anatomy, such as the pancreas and temporal bones, in a single rotation without table movement. In addition, the Aquilion ONE 320 Series G provides true 320*³ slice conventional helical and step-and-shoot modes with a gantry opening of 78 cm and tilting capabilities up to ± 30 degrees.

The Aquilion ONE 320 Series G incorporates a host of ergonomic and automated features to streamline productivity, deliver the highest quality images and that make examinations faster, safer and more clinically relevant than ever. Aquilion ONE 320 Series G also achieves consistently excellent image quality.

**³- Capable of 640 slice conventional and step-and-shot modes with Aquilion ONE 320 Series G to Aquilion 640 Series G upgrade kit.*

Single-Energy Metal Artifact Reduction (SEMAR)

SEMAR utilizes a sophisticated reconstruction algorithm to reduce artifacts caused by metal while improving visualization of the implant, supporting bone and adjacent soft tissues* for accurate imaging. SEMAR can be retrospectively applied to a routine low-dose scan, including volumetric, volumetric ECG gated and helical scans, combined with AIDR 3D Enhanced to achieve the best possible image quality without the need for additional exposure dose or a dedicated scan procedure. Canon Medical Systems will include SEMAR with each system as a value add.

** Bone structures near the metal-tissue interface may become distorted. Metal artifacts may not be completely removed in areas near the metal material. Comparison with the original images is suggested when performing diagnosis using SEMAR images.*

COMPONENTS

- 78 cm gantry with flared bore and iStation
- 694 lb. couch with custom table pad and positioning accessories
- Dual console with ergonomic operator controls
- High speed reconstruction hardware
- MegaCool™ V X-ray tube
- PUREViSION detectors and DAS
- Microsoft Windows 7 operating system
- Operator manuals and quality assurance phantoms

Ultra-Fast Workflow with Patient Comfort

The Aquilion ONE 320 Series G boosts productivity with fast scan and image reconstruction times up to 80 images per second while offering comfort features such as the wide flared bore (78 cm) and couch capacity (694 lbs.) for patients of all sizes pediatric to bariatric.

Aquilion ONE 320 Series G Edition makes exams easier for all patients. The routine fast scans also means short breath-holds that supports better patient compliance.

Dose-Reduction Features

Aquilion ONE 320 Series G reinforces Canon Medical Systems' guiding principle of ALARA for every patient. To achieve this, the Aquilion product line has an array of adaptive and integrated dose-reduction strategies that are implemented at every stage, from patient registration to image reconstruction. In addition, patient dose reduction is integrated into the protocol software, so it activates prior to turning on the x-ray beam.

SUREPosition

Patient centering plays a key role in a dose reduction strategy. The Aquilion ONE 320 Series G allows technologists to adjust the patient centering from the scanogram*¹. This supports improved patient iso-centering for more accurate mA modulation and may help to eliminate repeat scanograms.

**¹ - For lateral Table movement, the Lateral Tech Assist option is required (CALU-001A)*

Active Collimation

Active collimation synchronizes the width of the x-ray beam at the ends of the scan range to the clinically useful area needed for image reconstruction. By eliminating exposure that is not used for diagnosis, patient dose is reduced.

Adaptive Iterative Dose Reduction 3D (AIDR 3D Enhanced)

AIDR 3D Enhanced is the fourth generation in the evolution of Canon Medical Systems' dose reduction technology. AIDR 3D Enhanced is an iterative algorithm intended to reduce pixel noise from the original data, the results analyzed, and the process repeated until the target level of noise-reduction is achieved. This iterative algorithm is excellent in reducing background noise while preserving diagnostic information compared to non-iterative approaches.

AIDR 3D Enhanced can be integrated into all acquisition modes for routine clinical use and is able to reduce pixel noise magnitude in a way that may result in dose reduction.

SUREkV

Auto kV can be set for protocols using SUREExposure™, and the effective kV will be automatically selected based on patient size and SUREExposure settings.

SUREExposure 3D (x, y, z automated mA modulation software)

Canon Medical Systems' SUREExposure 3D software automatically adjusts the mAs rapidly during the scan to adapt to and compensate for changes in

attenuation level produced by the non-uniformity of the anatomy being imaged. Therefore, as the scan moves from the shoulders to the lung, the mAs goes down, and as the tube rotates around the patient, less mAs is used anterior-posterior than laterally. For the same image quality level, compared to non-modulated scanning, ^{SURE}Exposure 3D can reduce the dose to patients.

Auto Couch Height Positioning Compensation

^{SURE}Exposure will compensate for incorrect patient positioning to ensure accurate body size calculation and exposure dose. This avoids incorrect positioning errors in patient size calculation.

NEMA XR 25, XR 26 and XR 29

Aquilion ONE 320 Series G meets the National Electrical Manufacturers Association's (NEMA) Medical Imaging & Technology Alliance (MITA) standards XR 25, XR 26 and XR 29.

- MITA XR 25 Computed Tomography Dose Check
- Includes dose alerts and allows facilities to set dose notification values.
- MITA XR 26 Access Controls for Computed Tomography: Identification, Interlocks, and Logs
- Provides access control ensuring only authorized operators can alter controls of the CT equipment.
- MITA XR 29 Standard Attributes on Computed Tomography (CT) Equipment Related to Dose Optimization and Management
- Smart Dose standard bundles four important features to ensure that equipment produces high-quality diagnostic images while supporting patient safety:
 - DICOM Structured Reporting
 - CT Dose Check
 - Automatic Exposure Controls,
 - Pediatric and adult reference protocols.

KEY FEATURES

Routine Fast Scanning

The Aquilion ONE 320 Series G is capable of reconstructing 320 unique slices with every rotation of the gantry and incorporates a host of ergonomic and automated features to streamline productivity and deliver the highest quality images while lowering radiation dose.

Patients benefit from the extremely short exam times. Fast scan acquisition can also be used to meet the demands of helical CTA examinations for vascular imaging.

Double Slice Technology:

With Canon Medical Systems' coneXact™ algorithm the Aquilion ONE 320 Series G is able to generate 320 unique slices per rotation with high-quality

image reconstruction. No additional exposure is necessary as this advanced technology is entirely reconstruction based.

Optimal Space Utilization

The Aquilion ONE 320 Series G Edition has four main components: gantry, couch, console and transformer. The recommended minimum CT room size is only 24.7 square meters with the compact couch.

SURETechnologies

Improve workflow with real-time imaging, which provides the ability to view a scan at 12 frames per second (512x512) during the acquisition. This allows the operator to rapidly assess if additional images are needed.

The following are standard features on Aquilion ONE 320 Series G:

- **SUREExposure** – Dose modulation based on scanogram
- **SUREkV** – Automatically sets the effective kV based on patient size.
- **SUREStart** – Real-time contrast detection at 12 fps. With **SUREStart** there is no need to perform a timing bolus, saving up to 30 cc's of contrast.

Easy Operation

Aquilion ONE 320 Series G is easy to operate using the 19-inch LCD monitor, mouse and ergonomic keyboard. Scan automatically by programming procedures with eXam Plan and vocal instructions through VoiceLink™.

EQUIPMENT COMPONENTS

Gantry with iStation

Aquilion ONE 320 Series G Gantry possess many workflow advantages, iStation and gantry controls are accessible from the gantry or the scan console.

iStation

The iStation is a 12-inch LCD screen that uses video and voice prompts to ensure patient compliance during scanning. This is especially useful during pediatric scanning as the iStation displays a video of a small child that tells the patient when to raise their arms, when to hold their breath, and so on. These child-friendly instructions, coming from a child figure helps assure compliance. iStation also allows the user to visualize the patient's ECG waveform when acquiring ECG-gated exams.

Gantry

- Hybrid slip-ring technology conserves unused electricity
- Gantry tilts ± 30 degrees
- Large aperture: 78 cm
- Wide range of scan times provides greater flexibility for optimal image quality
- Gantry controls (touch panel) are located on the right and left anterior side of the gantry for easy access (posterior controls optional).

Console – Acquire and Display

- Powerful, ergonomic console computer handles display, image feed, filming and transferring multi-planar reconstructions with the same interface used for axial images.
- InstaView - Full matrix real-time image review
- Capable of true simultaneous scanning, retrieving, archiving and filming without interruption using the display console. This is a genuine multi-tasking system for multi-slice and volume data sets.
- Powerful reconstruction tower with CPUs and hard drives with RAID 5 controllers.
- Includes user-friendly keyboard, mouse, monitor, CPU cabinet/reconstruction enclosure.

MegaCool X-ray Tube

This compact, high-performance tube is designed to minimize tube-cooling delays with heavy patient loads at all scan times. It was built on the proven, anode-grounded, MegaCool tube technology used on every Aquilion multi-slice CT.

Other features include:

- Dual focal spots
- Anode capacity of 7.5 MHU
- Dissipation rate of 1,386 kHU per minute maximum

New PUREVision Detectors and DAS

- Solid-state detector array with 0.5 mm detector elements.
- Unique Canon Medical Systems ceramic, solid-state detector array and DAS.
- Light output has been increased by 40%.
- Covers 8 cm to 16 cm*¹ per rotation without any table motion.
- SUREConnect DAS – Ultra-fast DAS to acquire large volume data of detector.

**1- Requires Aquilion ONE 320 Series G to Aquilion 640 Series G upgrade kit.*

System	Axial/ Vol. Slices	Helical Slices
Aquilion ONE 320 Series G	320	320
Aquilion ONE 640 Series G	640 ¹	320
Aquilion ONE GENESIS Edition	640* ¹	320
<ul style="list-style-type: none">• System capable of reconstructing image data at 0.1 mm increments.• Slice values are based on one rotation and the Aquilion ONE coneXact Double Slice technology (Axial/Vol.) and 0.5mm slice x 0.25 mm increment for helical scans. <p>*¹ -Requires Aquilion ONE 320 Series G to Aquilion 640 Series G upgrade kit.</p>		

High-Power Generator

The Aquilion ONE 320 Series G generator requires only 125 kVA and generates 72 kW at 600 mA, standard on all Aquilion ONE Series G systems (exception Aquilion ONE GENESIS Edition, 100 kW at 900 mA^{*2}). This provides support for the 7.5 MHU x-ray tube and allows helical scans of up to 100 seconds

Multiple kV Selections: 80, 100, 120 and 135 kV.

**2- Requires Fast Scan and X-ray Power Upgrade Kit (A320G/FAST)*

IMAGE MANAGEMENT

Aquilion ONE 320 Series G images can be stored on hard disk or DVD and transferred via high performance gigabit Ethernet connection using DICOM 3.0 standards.

NETWORKING

SUREConnect DICOM Connectivity Package

Aquilion ONE Series G SUREConnect package supports DICOM 3.0 communications protocol with a set of tools that improve productivity and workflow. SUREConnect allows connectivity to DICOM 3.0 compliant scanners, workstations, printers with IHE profile support and auto-send to multiple DICOM destinations

- DICOM 3.0 Modality Worklist Management
- DICOM 3.0 Performed Procedure Step SCU
- DICOM 3.0 Enhanced CT Image Storage and Transfer
- DICOM 3.0 Query/Retrieve Service Class Provider (SCP)
- DICOM 3.0 Presentation of Grouped Procedures (PGP) and Study Split
- DICOM 3.0 (Storage SCU)

HELICAL SCAN & FUNCTIONALITY

MultiView

Built into protocols for fast multi-planar reconstruction in batch mode specifically for multi-slice data sets. Coronal, sagittal and axial images are created and displayed for immediate viewing.

3D Imaging on Console

Provides excellent image quality with surface-shaded renderings and volume-rendered 3D images. Provides zooming and panning over the 3D surface and performs distance measurements.

Other features include:

- Easy 3D

- Bone removal
- Maximum intensity projection (MIP)
- Minimum intensity projection
- Intensity volume rendering

Quantitative Analysis

- Profile display of CT numbers along a selected line in the axial plane
- Distance measurement and display
- CT number display
- Histogram display

eXam Plan Protocols

- 600+ eXam plan protocols that can be adjusted while scanning
 - Four preset reconstructions

Archiving

- Can be automated with each eXam plan
- Raw data and image data can be protected to prevent deletion

Filming

- Auto filming can be set as part of the eXam plan
- Images are displayed in 512x512 or 1024x1024

CUSTOMER CARE SERVICES

Developed with customer input, Canon Medical Systems' innovative support programs have resulted in increased customer satisfaction. These include the following:

InTouch Center®

This centralized service facility provides applications and service support for customers 24 hours a day, seven days a week.

InnerVision™ Plus

Remote system diagnostics are available around-the-clock to help identify problems and provide potential solutions before care is interrupted or an engineer can arrive. InnerVision Plus is included at no charge and connected while any CT is under warranty, or any service agreement including Full Service, In-House Support, Partnership and/or VISN Master Service Agreement

InTouch Agreements

Based on customer needs, InTouch customer agreements can range from an a-la-carte approach to full-security agreements that provide complete system protection.

Technical Assistance

Customer support specialists are available 24/7 to help resolve technical issues in real time. Application support specialists are also available to assist staff with protocol and image-quality issues.

Local Customer Teams

A single call mobilizes a local team of Canon Medical Systems customer engineers. With an average of 10 years of Canon Medical Systems experience and 105 hours of specialized training, they can resolve almost any performance issue.

Parts Support

A complete inventory of product parts is ready for shipment when and where they are needed, any time of day or night.

Image Maker Express

Image Maker Express is an online marketing resource that helps Canon Medical Systems customers build demand for imaging service by growing their referring physician and patient relationships. Image Maker Express includes:

- Easy-to-use marketing resources and tools developed exclusively for Canon Medical Systems customers to bring together effective marketing strategies and tactics.
- A wealth of collaterals and content to create high-quality brochures, print ads and more to help market the Canon Medical Systems customer's new imaging capabilities.

Image Maker Express Materials available include:

- Product images and logos
- Clinical images and videos
- PowerPoint presentations and promotional videos
- Brochure samples
- Customizable press releases and media tips
- Marketing strategy tutorials

***Offerings may vary per product**

APPLICATION TRAINING

Each system includes a custom developed three phase education program and the industry exclusive Performance Pro approach to learning.

Performance Pro is a unique approach to education utilizing blended learning with the promise of technical proficiency and optimal productivity for both physicians and technologists. If for any reason the customer is not

satisfied with any portion of the training, Canon Medical Systems will conduct that portion of the training again, at no charge.

Pre-Installation: Planning meeting at facility with Canon Medical Systems' CT Applications Manager to discuss objectives and timing of training, and to co-develop a custom program based on the facility's specific needs.

Choice of two (2) Medical Imaging Consultants (MIC) self-study programs; The CT Cross Trainer and/or The CT Registry Review Program.

The CT Cross Trainer is designed to acquaint the less-experienced technologist with important CT principles, technology and clinical exams. The program consists of 6 comprehensive Study Modules that have been accredited for 17 Category A CE credits; credits are earned by passing a post test for each Study Module.

The CT Registry Review Program is designed to help the experienced CT technologist prepare to pass the ARRT's post-primary exam in CT. The course consists of 8 comprehensive Study Modules that have been accredited for 19 Category A CE credits; credits are earned by passing a post-test for each Study Module.

Installation: A Clinical Evaluation will be conducted by an applications specialist, prior to turnover, to ensure the system is ready for the go-live date.

Phase I: Two (2) attendance vouchers for a four and a half (4.5) day technologist-focused course held at the Canon Medical Systems Institute of Advanced Imaging in Irvine, California. This course provides the fundamentals of operating Canon Medical Systems' Aquilion CT system, including a variety of CT scans performed with the latest dose reduction techniques. This course includes in-depth lectures and hands-on training. At the completion of the course, the attendee will be proficient in the following applications and operations: basic to advanced CT imaging console use, system menus, system default scan protocols, utilization of reconstruction parameters, post-processing image data, and troubleshooting image quality. This course is all inclusive of the following: tuition, airfare (booked by Canon Medical Systems), lodging, and meals. Accredited for CE credits by the ASRT Education Foundation.

Phase II: Two consecutive, thirty-two (32) hour weeks, of initial on-site education will be provided at the customer facility following system go-live. Unique with Performance Pro, Canon Medical Systems will send two applications specialists for the first week of on-site education. One specialist will provide training for up to four (4) imaging professionals including the two (2) that attended the Phase I training, to focus on maximizing scanning techniques and protocols. The second specialist will work with the physicians to achieve desired image quality. Training is scheduled

consecutively, Monday through Friday, with Monday mornings and Friday afternoons scheduled as travel time for the applications specialist. CE credits are earned by participants that attend the Phase II training events in their entirety.

Phase III: An additional twenty-four (24) hours of on-site education will be provided for the same four (4) imaging professionals, which participated in Phase II training, approximately 6-8 weeks following installation to optimize staff proficiency and system productivity.

Note: Canon Medical Systems personnel are not responsible for scanning patients, patient safety, any actual patient contact, or operation of equipment during education sessions. Canon Medical Systems will only demonstrate proper equipment operation.

The training is offered to the Customer at no charge, providing that it is completed no later than one (1) year after the warranty start date.

Additional classroom and onsite training is available for purchase.

COMPONENT SUMMARY:

<u>PART NUMBER</u>	<u>QTY</u>	<u>DESCRIPTION</u>
	1	[OC] AQUILION ONE GENESIS EDITION HIGH CAPACITY EXTENDED COUCH (/6)
	1	AQUILION ONE GENESIS EDITION EXTENDED HIGH CAPACITY COUCH
	1	ACCESSORY KIT FOR HIGH CAPACITY COUCH Includes each of the following items: <ul style="list-style-type: none">• Rolled Edge Foot Extension Pad• Wide & Medium Security Straps• Chin and Forehead Straps• Adult Head Rest Pads (Medium and Large)• Tilt Wedge• Knee Support Wedge• Coronal Head Support• Table Pad• Protective Table Covers (Box of Four)• Detachable rail 77"
	1	DICOM 3 MODALITY WORKLIST MANAGEMENT (MWM) SERVICE CLASS USER (SCU) SYSTEM Allows the CT system to obtain details of patients and scheduled examinations electronically from the HIS/RIS system, avoiding the potential mistakes of manual entry. <i>Note: This option does not include a DICOM gateway for the HIS/RIS system.</i>
	1	DICOM 3 QUERY/RETRIEVE SCP <ul style="list-style-type: none">• Allows a Storage Class User (SCU) to query the SCP device• Enables user devices to retrieve patient, study, series and/or image information in conformance with the DICOM 3.0 standard
	1	DICOM 3 QUERY/RETRIEVE SCU AQ/MP Allows a device to initiate a request for patient, study, series and/or image information from the provider device in accordance with the DICOM 3.0 standard.
	1	DICOM 3 STORAGE COMMITMENT SCU SOFTWARE Verifies image transfer and storage. <ul style="list-style-type: none">• Allows operator to determine if data is stored correctly at the PACS server, avoiding unintentional image deletion.• Improves efficiency of image management operations.

- Provides fail-safe method to prevent image data from being deleted unintentionally even in the event of a communication failure (during image transfer or during a storage verification response).

1 PRESENTATION OF GROUPED PROCEDURES (PGP) AND EXAM HARD SPLIT

PGP is an Integrated Health Enterprise (IHE) standard designed specifically with multiple examination orders (Requested Procedures) that can be performed in a single CT examination.

- Provides preset and automatic transfer solutions for multiple exams from a single CT exam.
- Facilitates clinical viewing of images and reporting of individual requested procedures.
- Use with PACS systems that are IHE PGP compliant.
- Use the study split option for PACS systems that are not yet IHE PGP compliant to physically split images into multiple examinations.

1 CT PHANTOM

Measures image quality to ensure compliance to Canon Medical Systems standards for:

- High-contrast resolution
- Low-contrast resolution
- Slice thickness
- Noise
- Contrast scale

2 MULTIFUNCTION TASK CHAIR WITH ARMS

1 CONSOLE DESK 65" X 36" X 30"

Measures 65" x 36" x 30"

5 MEDIA,DVD-RAM DRIVE (9.4 GB)

- 9.4 GB
- Two-sided

1 NON-CORROSIVE FLOOR LEVELING EPOXY KIT

1 GENESIS DISPLAY CONSOLE UPGRADE KIT

1 REAR GANTRY PANEL KIT

The Gantry Rear Panel kit supports improved work flow, easy access and quick set up by adding additional gantry controls to the rear gantry panels which include the following operations:

- Couch movement – vertical/horizontal. (Lateral table movement available with Lateral Table Movement Kit purchasable option)
- Tilt – ability to tilt the gantry
- Projector ON/OFF – turn positioning laser on and off

- 0-Clear – set “0” landmark
- Couch-top free –Manual couch movement can be activated

NOTE: *Provides left and right rear gantry controls*

Prerequisite: *Aquilion ONE Genesis and Aquilion Precision.*

1 POWER DISTRIBUTION UNIT FOR GENESIS

The GENESIS PDU is engineered to address common power problems found in the hospital environment and to isolate the CT system components to meet IEC 60601-1 Third Edition requirements. This is important to assure optimal reliability and performance of CT systems. Customer is responsible for complying with Canon Medical Systems’ site specifications for electrical power.

This device provides most of the electrical site preparation requirements of Canon Medical Systems CT systems. The PDU contains a low impedance isolation step-down transformer with a shielding plate between primary and secondary.

Voltage Conversion

Wiring costs are significantly reduced since the PDU accepts a single, 480V delta input, supplying 200V to the generator and the various other parts of the system.

Distribution

The GENESIS PDU comes prepackaged with the distribution breakers needed for each system feed. Having all system breakers in one location also makes it easier for service personnel to remove power.

Installation

Installation is much faster, more predictable, and less expensive with a factory-assembled and tested system.

1 VARIABLE HELICAL PITCH (PRE V6-REQUIRES SURECARDIO ECG GATING)

vHP3 (Variable Helical Pitch) improves workflow by enabling a clinically relevant change of helical pitch and scan parameters during a single planned acquisition. Up to three ¹ distinct helical pitch and scan factor settings can be set on a single scan range as well as an ECG gated scan if needed. As a result, CT procedure times can be reduced and image quality improved.

¹⁻ *Three phase Variable Helical Pitch (vHP3) requires Version 8.3 software or greater.*

Prerequisite:

- *Aquilion ONE (TSX-301A and TSX-301B) – System software version 4.4 or greater*

- *Aquilion ViSION, Aquilion PRIME and Aquilion Prime SP - System software version 6.0 or greater.*
- *Aquilion Lightning – System software version 7.0 or greater.*
- *Aquilion Precision –System software version 8.6 or greater*

1 TECH ASSIST LATERAL TABLE SLIDE FOR AQUILION ONE GENESIS SERIES

Canon Medical Systems' exclusive Tech Assist Lateral Table Slide, improves technologist safety by automating the adjustment of patients on the table. In addition, it improves access for interventional procedures and accommodates off-center imaging. It provides the ability to move the table in a variable 8.4 cm (4.2 cm on each side). This exclusive lateral movement of 8.4 cm improves image quality, minimizes patient dose and provides better access for interventions and emergency patients.

With the Aquilion CT Systems, ergonomics and patient access have evolved to a new degree with the eVolution couch and gantry. Offering comfort and convenience, they increase operator efficiency for faster throughput while improving patient compliance to ensure higher quality exams.

Note: Available on Aquilion High-Capacity Couch Only

1 LATERAL COUCH MOVEMENT KIT

1 INJECTOR SYNCHRONIZATION FOR AQUILION ONE GENESIS EDITION

Provides synchronization of the Aquilion CT with a contrast injector that supports CAN Protocol Level 1. This enables the CT scan to be started remotely using the injector during contrast-enhanced CT exams.

Key Features

- Improves contrast timing and optimizes workflow
- Synchronized start improves control of contrast enhancement
- Simplified operation enables single operator workflow

Enhance Safety

- One-button on either the scanner or injector starts and stops the sync protocol (provides stop message at console when stopped at injector)
- Technologist can remain at the patient's side

Prerequisites:

- *TSX-305A/3*

Acist or MEDRAD Injector with Injector Synchronization. For injectors with other options, such as MEDRAD's Certegra platform, additional DICOM options, such as Performed Procedure Step, will be required as well.

1 INJECTOR SYNCHRONIZATION SOFTWARE CAN PROTOCOL

1 SURECARDIO WITH PHASEXACT FOR AQUILION ONE GENESIS EDITION

SURECardio for Aquilion ONE provides the basic foundation package of hardware and software for advanced cardiac imaging. It includes a compact ECG monitor with a color screen for easy set up and monitoring.

Aquilion ONE SURECardio volumetric CT with arrhythmia detection provides real time beat monitoring and the ability to acquire volumetric cardiac CTA within one heartbeat. No table movement is required. If an arrhythmia or abnormal heartbeat is detected Aquilion ONE can automatically adjust the scan and acquire the next normal heartbeat.

The axial gated acquisition provides low dose to the patient for evaluation of calcified plaque. The system acquires data utilizing an ECG gated software that provides a fast gated output for R-wave synchronization

SURECardio phaseXact eliminates the need for unnecessary multiple reconstructions by automatically selecting and reconstructing the cardiac phase with the least motion.

SURECardio Prospective™ is a unique application that dramatically lowers patient dose during coronary CTA exams. This advanced software provides enhanced workflow with automatic pitch selection and exposure window setting based on patient's heart rate and employs the use of the helical acquisition and an x-ray on/off modulation technique.

This unique application allows for rapid data collection during every heartbeat, producing short scan times with a dramatic reduction of x-ray exposure and contrast dose to the patient.

CARDIAC APPLICATION TRAINING

Utilizes a two phase education approach.

Prerequisite

Phase I: Is a prerequisite to on-site education: Attendance in the Advanced Cardiac Course (CT-TRAINING-301) held at the Institute for Advanced Imaging, Irvine, CA.

Phase II: Twenty-four (24) hours of on-site education will be provided at the customer facility for up to four (4) imaging professionals including the one (1) that attended prerequisite Phase I training. Training is focused on maximizing cardiac scan techniques and protocols and to optimize staff proficiency and system productivity in cardiac imaging. Training is scheduled for three (3) consecutive days during standard business hours. CE credits are earned by participants that attend the Phase II training event in its entirety.

Note: Canon Medical Systems personnel are not responsible for scanning patients, patient safety, any actual patient contact, or operation of equipment during education sessions. Canon Medical Systems will only demonstrate proper equipment operation.

Education expires two (2) years from the later of purchase date or warranty start date.

Additional classroom and onsite training is available for purchase.

Applications support is available by phone on the toll-free ASSIST line, 1-800-521-1968.

1 ECG GATING SCANNING SYSTEM

1 STAND, ECG UNIT (MODEL-7800)

1 ECG MONITOR, R WAVE CARDIAC TRIGGER 7800T

Cardiac ECG Trigger Monitor Model 7800T for use with CT hardware and software to measure skin impedance to help ensure reliable scanning.

- Compact ECG monitor with fast gated trigger output for R-wave synchronization applications
- High & Low Heart Rate Limits
- 6.5" Color LCD Display (TFT Active Matrix)
- Integrated ECG simulator to test the integrity of the patient cables, lead wires, and electronic circuitry.

1 ADVANCED AQUILION ONE / PREMIUM CARDIAC CT COURSE FOR TECHNOLOGISTS

One (1) attendance voucher for a three day technologist-focused course held at the Canon Medical Systems Institute of Advanced Imaging in Irvine, California. This course provides a foundation of cardiac anatomy and physiology with ECG and cardiac gating, including CT scans performed with the latest dose reduction techniques. This course includes in-depth lectures and hands-on training on the CT scanner and Vitrea post-processing systems. At the completion of this course, you will be proficient in the following operations: cardiac anatomy and physiology, CTA scanning, ECG monitoring, image quality assessment and image processing. Vitrea post-processing training includes coronary artery calcium scoring and cardiac functional analysis. This course is all inclusive of the following: tuition, airfare (booked by Canon Medical Systems), lodging and meals. Accredited for CE credits by the ASRT Education Foundation.

Prerequisite: Currently operating an Aquilion ONE system

Education expires two (2) years from the later of purchase date or warranty start date.

Additional classroom and onsite training is available for purchase.

Applications support is available by phone on the toll-free ASSIST line, 1-800-521-1968.

1 ARM HOLDER (ONE SIDE)

CT Armrest – One Side
Arm support for IV injection
For tabletop width of 47 cm

1 HANDLE, TABLE, OVERHEAD

- Handle for abdomen scanning
- Positioned at the headrest bracket

1 COLOR PRINTER INTERFACE FOR NETWORK PRINTERS

Transfers windows in the image display area to a Post Script color printer (sold separately) via a network. Compatible with Aquilion ONE, 64, 64, 16, 8, Super4, and Asteion Super 4 PC-Based systems.

Features

- Supports 24-bit, full-color Postscript printing
- Specify next print job before current job is complete
- Able to print while checking contents

Note: Postscript Printer sold separately

1 DICOM 3 STORAGE SERVICE CLASS PROVIDER (SCP)

- Exchanges DICOM 3.0 compliant image objects on a network
- Allows the system to perform functions requested by a Storage Class User (SCU) device

1 DICOM 3 PERFORMED PROCEDURE STEP SCU

In combination with COT-32D (MWM), MPPS provides notification of the start and end of the examination back to an RIS that supports DICOM MPPS (SCP). Exam record and patient information can also be sent to the RIS.

1 SURECARDIO SCORING ON CONSOLE (REQUIRES ECG OPTION)

^{SURE}Cardio Scoring on-console software is designed to calculate calcium scores from non-contrast-enhanced CT data acquired during an ECG-gated cardiac exam.

Key Features

- Calculates Ca scores using the Agatston method and the Volume Mass method.

- Calculates and displays the score and number of Ca lesions for each of the following coronary artery branches:
 - Right coronary artery (RCA)
 - Left main trunk (LM)
 - Left anterior descending branch (LAD)
 - Left circumflex branch (LCX)
- Calculates and displays the total score and number of Ca lesions.
- Displays a report containing:
 - The calculated scores
 - The corresponding guidelines indicated by the studies accepted as the standards in the field
 - The axial images for the highest 12 scores
- Outputs the report to a general-purpose printer or a DICOM network printer.
- Registers the report in a DICOM SC file as a new series added to the corresponding data.

Prerequisite: ^{SURE}Cardio ECG gating (option, must be purchased separately).

1 ADDITIONAL ON-SITE APPLICATIONS TRAINING - 32 HOURS

Four (4) days, thirty-two (32) hours, of additional onsite applications support. Training is scheduled consecutively, Monday through Friday, with Monday mornings and Friday afternoons scheduled as travel time for the applications specialist.

Note: Canon Medical Systems personnel are not responsible for scanning patients, patient safety, any actual patient contact, or operation of equipment during education sessions. Canon Medical Systems will only demonstrate proper equipment operation.

Education expires two (2) years from the later of purchase date or warranty start date.

1 CT AQ ONE GENESIS BIOMED TRAINING COURSE - TUITION ONLY (10 DAYS)

This ten day clinical biomed engineer-focused course is held at the Canon Medical Systems Institute of Advanced Imaging in Irvine, CA. It is for Engineers experienced in CT and diagnostic imaging who will service the Aquilion ONE Genesis CT scanner. The training course will focus on basic operation, preventative maintenance, and, troubleshooting and repair procedures for the most common system problems on the Aquilion ONE Genesis CT scanner.

This course will be conducted in a blend of instructor led classroom discussions and laboratory hands-on practice. There will be quizzes during

the class that will be used to check comprehension of various course modules.

The system used in this class will be a TSX-305A/1, which includes the TSX-305A/3 hardware levels.

As part of the requirements to pass this course, all Engineers will be required to pass a written exam with a score of 80% or better.

At the completion of this course, the student will be able to:

- Follow the documented safety procedures while servicing the Aquilion ONE Genesis CT scanner.
- Utilize Service Publications for system specification and repair procedures.
- Verify that the CT scanner's performance and operational status meets Canon Medical Systems' standards.
- Perform planned routine preventive maintenance.

Students must bring notebook computers equipped with Pentium-class CPUs, 10 GB of available hard disk space, Windows 7 or current, DVD/CD-ROM drive, a crossover serial cable, and Ethernet wired network connectivity. Laptops are not available to borrow or rent during class.

This course includes tuition only. Airfare, meals and lodging are not included.

OPTIONS

SYSTEM UPS 125 KVA 480 VOLT INPUT / 480 VOLT OUTPUT FOR GENESIS **REQUIRES AQ/PDU/G**

MAINTENANCE BYPASS 3 PHASES 250A

CONSOLE UPS FOR AQUILION ONE GENESIS

Wesemann 3-phase 10 kVA uninterruptible power supply and connection kit for Aquilion ONE console.

REMOTE CONTROL PANEL RMC-2010 FOR WESEMANN UPS U10K WITH CABLES

The remote control panel is physically connected with the UPS (by cable) and allows distant monitoring and management of the system. The panel can be installed remotely from the UPS and power supplied by the interface cable.

AREA FINDER KIT FOR AQUILION ONE GENESIS SERIES

Area Finder allows patient positioning without performing scanoscopy by projecting the reference scan range (in the axial (X) and transverse directions (y)) for volume scans to be visualized directly using laser apparatus.

Requires: TSX-305A/3.

NOTE: Designed for Volumetric acquisitions.

AQUILION SURESUBTRACTION KIT WITH SURESUBTRACTION SCAN (CHSS-001A)

SURESUBTRACTION (ORBITAL SYNC)

^{SURE}Subtraction Orbital Synchronization is used to perform scanning with the scan orbits of several helical scans synchronized. By synchronizing the helical scan orbits the subtraction process provides improved visualization of the vertebral arteries and internal and external carotids.

Enhanced Diagnostics

- Supports improved subtraction volumes for free of bone images and providing extraordinary subtraction CTA studies of the brain and neck
- Easily achieves arterial and venous segmentation
- In just seconds, creates 3DVR and MIP images with 360° left-to-right and head-over-heels tumble views

Enhanced Workflow

^{SURE}Subtraction Orbital Synchronization combined with ^{SURE}Subtraction Scanning helps improve workflow

- Less than 5 minutes to load, process and display images
- Subtracted dataset is still in DICOM format
- Maximize productivity with programmable features
- No special head immobilization required

Note: Available on Aquilion ONE, Aquilion Precision, Aquilion PRIME, Aquilion Prime SP and Aquilion Lightning family - Requires V4.74 or later.

SURESUBTRACTION LUNG (RECOMMEND CHSS-001A SURESUBTRACTION SCANNING)

Requiring a minimum of two data sets from the same scan, ^{SURE}Subtraction Lung has been designed with an easy work flow to aid physician's visualize lung parenchyma by subtracting the non-contrast enhanced volume from a contrast enhanced volume.

The resulting data can be displayed in multiple views including color mapping and subtracted views that can be saved in the target study as a new data series for transfer and archiving.

Prerequisite:

Recommend CHSS-001A/1B ^{SURE}Subtraction Scanning

- *Aquilion ONE, Aquilion PRIME, Aquilion Prime SP and Aquilion Lightning - System software version 6.0 or greater.*
- *Aquilion Preciosn -System softare version 8.6 or greater*

Note: Only one CHSS-001A license required per scanner.

SUREFLUORO: CT FLUORO KIT GENESIS SERIES WITH FLAT-PANEL MONITOR

^{SURE}Fluoro with Single-Energy Metal Artifact Reduction (SEMAR) and AIDR 3D permits real time image reconstruction to display 3 images obtained by combining data from the wide area detector.

AIDR 3D, applied to continuous real-time CT Fluoroscopy, coupled with ^{SURE}Start allows real-time imaging at a reduced dose. 3D Needle Positioning includes an easy to understand Angle Guide display for needle navigation during CT Fluoroscopy procedures.

SEMAR utilizes a sophisticated reconstruction algorithm to reduce artifacts caused by metal while improving visualization of an implant, supporting bone and adjacent soft tissues* to support accurate imaging. SEMAR can be applied to a routine low-dose scan, combined with AIDR 3D to achieve the

best possible image quality without the need for additional exposure dose or a dedicated scan procedure.

Furthermore, ^{SURE}Fluoro employs volume ONE shot, which is CT fluoroscopy volumetric scanning with MPR oblique display. MPR and oblique image guidance ensures accurate needle positioning with complete confidence during complex biopsy procedures, saving time and improving patient safety.

Half scan can be selected for the scan mode, and the exposure angle can be specified.

Prerequisite: Requires: TSX-305A/3 and version 7.3 or greater.

**** Bone structures near the metal-tissue interface may become distorted. Metal artifacts may not be completely removed in areas near the metal material. Comparison with the original images is suggested when performing diagnosis using SEMAR images.***

CEILING SUSPENSION MOUNT FOR LCD MONITOR

Ceiling mounted suspension system comprised of:

- Mounting plate
- Articulating arm, 165 cm long
- Holder for one flat screen monitor

MAVIG 360 COLUMN - FIXED (58 CM)

4-D NEURO PERFUSION PACKAGE WITH SURESUBTRACTION FOR AQUILION ONE CONSOLE

Aquilion 4-D Neuroperfusion package includes:

- 4-D Brain Perfusion
- ^{SURE}Subtraction automatic bone removal
- Automated perfusion maps
- 4-D DSA whole brain temporally uniform Digital Subtraction Angiography

Dynamic 4-D Brain Perfusion

CT perfusion is a fast brain imaging modality for use in the management of patients with various neurological disorders, ranging from acute stroke to subarachnoid hemorrhage. It provides excellent image quality with surface shaded-renderings and volume-rendered 4-D images. In addition, it provides zooming and panning over the 4-D surface and performs distance measurements.

Aquilion 4-D Neuroperfusion package includes ^{SURE}Subtraction which allows you to acquire, reconstruct, and review whole brain volumes including the arteriogram, venogram, and whole brain perfusion using this totally flexible, comprehensive toolkit.

^{SURE}Subtraction automatically removes bone and other highly attenuating objects from the image resulting in superb images, including even vessels adjacent to or surrounded by bone. Aquilion 4-D Neuroperfusion package adds the unique benefit of whole brain perfusion imaging, something no conventional multi-slice CT offers.

All these examinations can be obtained with a single dynamic acquisition and a single injection of contrast material making Aquilion ONE fast, accurate, and simple to use. Beyond the enhanced clinical diagnosis that can be realized by a perfectly timed arteriogram and venogram, the data can also be displayed for the first time as a whole brain CT digital subtraction angiography data set and a temporally uniform whole-brain perfusion study.

^{SURE}Subtraction - neurovascular CT digital subtraction angiography (CT DSA) software enhances diagnostic accuracy through greater image clarity and improves workflow. The software automates digital subtraction of the intra- and extra-cranial vessels from bone, providing high quality clinical images in a fraction of the time of manual subtraction.

Enhanced Diagnostics

- Subtraction volume is virtually free of bone.
- Automatic detection of superior sagittal sinus
- More easily achieves arterial and venous segmentation
- In just seconds, creates 3DVR and MIP images with 360° left-to-right and head-over-heels tumble views

Enhanced Workflow

- Less than 5 minutes to load, process and display images
- Automated on-console imaging of cerebral blood flow, cerebral blood volume, and time-to-peak or mean transit time.
- Subtracted dataset is still in DICOM format
- Maximize productivity with programmable features
Streamline patient throughput with a simple 3-step process

PATIENT OBSERVATION SYSTEM WITH COLOR CAMERA AND LCD MONITOR

This device allows a technologist to easily monitor the patient while inside the CT scanner. The technologist is able to view and correct patient movement, assuring patient compliance. This efficiency cuts down on scan time and reduces repeat scans. Our patient monitoring video camera system utilizes an HD camera for video patient monitoring, which can be mounted on any wall in the CT room.

Includes:

- Wall-mounted TV camera
- Color 15 in. LCD monitor
- Cabling