Children's
of Alabama⁎

August 7, 2020

Ms. Emily T. Marsal
Executive Director
State Health Planning and Development Agency (SPHDA)
100 North Union Street, Suite 870
Montgomery, Alabama 36104

RE: Request for Determination of Exemption Status for Replacement Equipment

Dear Ms. Marsal:

The Children's Hospital of Alabama (Children's) is submitting the attached Request for Determination of Exemption Status to replace the imaging equipment for vascular and neurological intervention radiology. The equipment cost will total $1,978,495 and construction costs are estimated at $770,000, which are both below the statutory thresholds requiring a Certificate of Need. Thus, Children's respectfully requests a determination of exemption status to replace the equipment.

The filing fee in the amount of $3,956.99 has been submitted via the SHPDA electronic payment portal.

Should you have any questions or need clarification, please contact me at (205) 638-9012.

Sincerely,

Christi Napper
Director, Facilities Development and Institutional Planning

Children's
of Alabama®

August 18, 2020

Ms. Emily T. Marsal
Executive Director
State Health Planning and Development Agency (SPHDA)
100 North Union Street, Suite 870
Montgomery, Alabama 36104

RE: Request for Determination of Exemption Status for Replacement Equipment Clarification

Dear Ms. Marsal:

The Children's Hospital of Alabama (Children's) submitted a Request for Determination of Exemption Status to replace the imaging equipment for vascular and neurological intervention radiology on August 7, 2020.

In response to your clarification letter dated August 17, 2020, the existing equipment will be taken out of service but will remain on site. However, this equipment will only be used as backup if the new Philips Azurion 7 Biplane B20 experiences downtime. It will not be used on a day to day basis.

Should you have any questions or need clarification, please contact me at (205) 638-9012.

Sincerely,

Christi Napper
Director, Facilities Development and Institutional Planning

RECEIVED

Aug 10 2020

STATE HEALTH PLANNING AND
DEVELOPMENT AGENCY

Request # EQR2020-002
Date Rec. _____
Received by: tml_____

REQUEST FOR DETERMINATION OF EXEMPTION STATUS
FOR REPLACEMENT OF EXISTING EQUIPMENT

A filing fee in the amount of $ 3,956.99 tml has been submitted with this application.

REQUESTER IDENTIFICATION (Check One) HOSPITAL (X) NURSING HOME (___)
OTHER (___) (Specify) _____

A.____The Children's Hospital of Alabama
Name of requester

____1600 Seventh Avenue S   Birmingham   Jefferson
Address   City   County

Alabama   35233   (205) 638-9100
State   Zip   Phone

B.____same as above
Name of Facility/Organization (if different from A)

Address   City   County

State   Zip   Phone

C.____same as above
Name of Legal Owner (if different from A or B)

Address   City   County

State   Zip   Phone

D.____Christi Napper, Director of Facilities Development & Institutional Planning
Name and Title of Person Representing Proposal and With Whom SHPDA Should
Communicate

____1600 Seventh Avenue S   Birmingham   Jefferson
Address   City   County

AL   35233   (205) 638-9012
State   Zip   Phone

DESCRIPTION OF EQUIPMENT TO BE REPLACED   DESCRIPTION OF PROPOSED NEW EQUIPMENT

A.   Manufacturer:

Toshiba   Philips

Serial #

11M416U   TBD

B.   Model:

Infinix VFi / BP / FDR   Azurion 7 Biplane B20

C.   Name of equipment:

Infinix VFi / BP / FDR   Azurion 7 Biplane B20
Interventional Radiology   Interventional Radiology

D.   Fair market value of equipment at present:
$31,417 - $110,000

E.   Cost of equipment (include written price quote):
$1,978,495 (see attached quote)

F.   Describe use of current equipment:
The existing equipment is used to perform vascular and neuro interventional
radiology procedures.

Describe use of proposed equipment:
The new equipment will perform similar vascular and neuro interventional
radiology procedures.

G.   List any attachments or additional procedures associated with this equipment that could not be
performed by old equipment:
The new biplane includes cone beam CT advanced technology.

H. Can any procedures be performed with the proposed new equipment that cannot be performed with the replaced equipment? If yes, describe in detail:

There are no additional procedures to be provided by the new equipment.

I. Location of existing equipment (include room #):

The existing equipment is located on Children's Main Campus in the Russell building on 4th fl. There is no room number.

J. List specially trained or qualified personnel necessary for operation of equipment:

Personnel include vascular and neuro interventional radiologists and radiology technicians.

K. What use will be made of old equipment when replaced?
    (Trade in on new equipment, used as back up, save for parts, etc.)

The existing equipment will be taken out of service.

L. List job titles of any additional personnel that will be required to operate the new equipment.

There are no additional personnel.

M. Describe any renovation or new construction that will be necessary for the installation of the replacement equipment and cost.

The construction cost to build out a shelled area on the Russell building 3rd fl will be approximately $770,000.

N. Describe any new annual operating cost associated with this project such as maintenance contracts, salaries of new employees hired due to equipment, etc.

There are no new annual operating costs.

III.　COST

A.　Equipment costs $ 1,978,495
(Costs have to be supported by price quote on manufacturer's
stationery or letterhead.) Cost of equipment only; do not list
lease cost.

B.　Less trade-in of old equipment $ 0

C.　Total cost of equipment $ 1,978,495

Calculation of fee for this determination:
Multiply dollar amount in III.C. (total cost of equipment) times 1% (the application fee for a Certificate
of Need); 20% of this amount is the application fee for non-rural hospitals.
For rural hospitals, the application fee is 25% of the application fee as calculated above for non-rural
hospitals.

Include manufacturer's literature on old equipment, if available, and on the new equipment.

Include any other information pertinent to the determination.

The Executive Director may request any other information which is relevant to his decision.

IV.　CERTIFICATION

I certify that the information provided herein is true and correct and that there is no additional
information which would be pertinent to this application which has not been provided. Further, I
understand that any misrepresentation on this application or failure to include relevant information
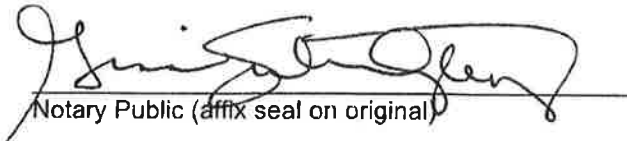may void any favorable determination secured by such misrepresentation or omission.

_____
Signature of Applicant

Mike McDevitt, Executive VP of Facilities
_____
Applicant's Name and Title
(Type or Print)

Sworn to and subscribed before me this
___ day of ___August___ , 20 20 .

_____
Notary Public (affix seal on original)

My Commission Expires:
August 10, 2022

Rev. 5-13   A-29

Quotation #: 1-201XQ3L	**Rev:** 7	**Effective From:** 02-Jun-20	**To:** 30-Jun-20

Presented To:	**Presented By:**	
THE CHILDRENS HOSPITAL OF ALABAMA 1600 7TH AVE S BIRMINGHAM, AL 35233	Justin Helms *Account Manager*	**Tel:** (256) 590-3943 **Fax:**
	Steve Shever *Regional Manager*	**Tel:** **Fax:**

Tel:

Alternate Address:

Date Printed: 02-Jun-20

This quotation contains confidential and proprietary information of Philips Healthcare, a division of Philips North America LLC ("Philips") and is intended for use only by the customer whose name appears on this quotation. It may not be disclosed to third parties without the prior written consent of Philips.

IMPORTANT NOTICE: Health care providers are reminded that if the transactions herein include or involve a loan or discount (including a rebate or other price reduction), they must fully and accurately report such loan or discount on cost reports or other applicable reports or claims for payment submitted under any federal or state health care program, including but not limited to Medicare and Medicaid, such as may be required by state or federal law, including but not limited to 42 CFR 1001.952(h).

Quote Solution Summary

Line #	Product	Qty	Price
	100239 Azurion 7 B20	1	$1,978,495.00
		Equipment Total:	$1,978,495.00

Solution Summary Detail

Product	Qty	Each	Monthly	Price
100239 Azurion 7 B20	1	$1,978,495.00		$1,978,495.00

Buying Group: VIZIENT SUPPLY LLC   **Contract #:** Multi Modality GB Q2 20

Addt'l Terms:

Each Quotation solution will reference a specific Buying Group/Contract Number representing an agreement containing discounts, fees and any specific terms and conditions which will apply to that single quoted solution. If no Buying Group/Contract Number is shown, Philips' Terms and Conditions of Sale will apply to the quoted solution.

Each equipment system listed on purchase order/orders represents a separate and distinct financial transaction. We understand and agree that each transaction is to be individually billed and paid.

Payment Terms: 0% Down, 80% Upon Delivery, 20% Due When the Product is Available for First Patient Use, Net due 30 days from date of invoice

Quote Summary

Qty	Product
1	NNAE121 CV 3DRA OnSite Educ 16h
1	NNAE785 Azurion 7 Biplane 20/15 Vascular
1	NNAE049 XperCT OnSite Clin Ed
1	NNAE048 XperGuide OnSite Educ 08h
2	FCV0017 CS universal cable carrier
10	FCV0588 Isolated Wall Connection Box
1	NCVD187 ClarityIQ...
2	FCV0824 video WCB on rear side 1st MCS
2	FCV0812 live/ref slaving for ER
1	NCVD062 optional ref biplane
1	NCVA101 peripheral X-ray filter
1	NCVB168 3D Roadmap
1	NCVA695 FD Rotational Angio
1	NCVA851 Swivel for table base.
1	NCVD064 extension to FlexVision Pro
1	NCVC795 3D-RA R6
1	NCVD073 SmartMask Biplane
1	NCVD138 table tilt option
1	NCVB845 XperGuide
1	NCVD032 FlexVision XL HD + 2 LCD's
1	NCVC796 XperCT Dual.
1	NCVD081 Touch Screen Module Pro
1	NCVD133 FD Dual Fluoro biplane
1	NCVD178 IW Hardware
1	FCV0510 Long mattress cardio
1	FCV0625 Table mounted rad. Shield
1	FCV0815 add. table access. rail (US)
1	FCV0817 Accessory rail + cable ext.kit
1	989801220158 Mark 7 Arterion, Table Mount
2	989801220375 Black Anti-fatigue Floor Mat w/logo.
2	989801256034 iXR Full Travel Package OffSite
1	989801220514 · Compact Low Load Fluoro UPS – Standard
1	SP059Q Clinical Services Flex Account

Qty	Product
1	SP059M LIFE Commercial Upgrades
1	SP059R Service Items
1	SP059U Maximizer Basic Package

System Type:	New
Freight Terms:	FOB Destination
Warranty Terms:	Part numbers beginning with two (2) asterisks (**) are covered by a System 12 Months Warranty. All other part numbers are third (3rd) party items.
Special Notations:	Contingencies must be removed 120 days before scheduled shipment to assure delivery on specified date. Any rigging costs are the responsibility of the Purchaser.
Additional Terms:	

Line #	Part #	Description	Qty	Each	Price
1	**NNAE121	CV 3DRA OnSite Educ 16h	1		

Clinical Education Program for 3DRA

CV 3DRA Handover OnSite Education:

Philips Education Specialists will provide sixteen (16) hours of education for up to four (4) students, selected by customer, including technologists from night/weekend shifts if necessary. CEU credits may be available for each participant that meets the guidelines provided by Philips. Please refer to guidelines for more information. Note: Site must be patient-ready. Philips personnel are not responsible for actual patient contact or operation of equipment during education sessions except to demonstrate proper equipment operation.

Education expires one (1) year from equipment installation date (or purchase date if sold separately). Ref# 222-100615
This training requires the purchase of 3DRA.

Line #	Part #	Description	Qty	Each	Price
2	**NNAE785	Azurion 7 Biplane 20/15 Vascular	1	$1,315,935.00	$1,315,935.00

Advanced solution for performing interventions in the neurology domain and complex cardio-vascular interventions

Key benefits
• The unique ceiling mounted lateral double arc provides full projection flexibility
• Optimized utilization of your lab by procedure based workflow
• Superb image quality to evaluate small details and vessels with clarity
• Intuitive user interaction delivering an easy to use, easy to learn system

A vision for innovative neuro interventions
With our Live Image Guidance we aim to remove barriers to safer, effective and reproducible treatments, delivering relevant clinical value where it's needed most - at the point of patient treatment. Intelligent and intuitive integration of live imaging, patient information, and procedure-based applications optimize real time therapy guidance.

The Philips Azurion 7 B20/15 LN system is designed to enhance your treatment capabilities and support more effective device guidance and placement in neurology interventions. Additionally, can also be used in cardio/cardio-vascular interventions. This future proof solution is designed around a single, standardized hardware and software platform that can be upgraded and expanded as new needs arise or requirements change. Its architecture is made to easily integrate with third party applications and devices. A new workflow approach aims to support interventional teams in carrying out more procedures for more patients, more consistently and efficiently with great ease of use.

The Philips Azurion 7 B20/15 LN uses a range of ProcedureCards to help optimize and standardize system set-up for your cases, from routine to mixed procedures. ProcedureCards can increase the consistency of exams by offering presets (e.g. most-frequently used, default protocols and user-specified settings) on procedure-, physician- or departmental level. In addition, hospital checklists and/or protocols can be uploaded into the Procedure Card to help safeguard the consistency of interventional procedures and help to minimize preparation errors.

The Philips Azurion 7 B20/15 LN interventional X-ray suite has been specifically designed to save time by enabling the interventional team to work on all activities in the exam room - and at one or more work spots in the control room at the same time - without interrupting each other. This leads to higher throughput and faster exam turnover and contributes to quality of care.

To improve dose management, Philips Zero Dose Positioning enables you to move the stand and table to the region of interest shown on the last clinical image hold before a new acquisition is started, without any radiation.

Specifications

The Azurion 7 B20/15 biplane cardiovascular system comprises a floor-mounted C-arm stand, a ceiling suspended double C-arm stand and digital imaging X-ray system for cardiovascular diagnostic and interventional procedures.

The Azurion 7 B20/15 system is an integrated single-host concept. The system comprises five functional building blocks:
1. Geometry
2. X-ray Generation
3. Image Detection
4. User Interface
5. Viewing

1. Geometry
The geometry segment offers full cardiovascular projection possibility.
It includes:
Frontal stand
A motorized frontal floor-mounted -stand.
A rotatable base plate (motorized and manually operated) enables a clear area around the patient table. All stand movements are motorized. The manual and motorized parking movement consists of floor-mounted rotation. Angulation and Rotation of the C-arm is also motorized at high speeds. Parking of the stand can be done both manual and motorized, over the full range. With electronic autostop positions. This motorized movement makes positioning in the isocenter easy and accurate. It also features comfortable, single operator control of stand parking. The Azurion stand allows a very wide range of projections, including PA and AP imaging.

In the head position (0 degrees position, L-arm parallel to patient table):
C-arm rotation range (degrees): 120 LAO to 120 RAO
C-arm angulation range (degrees): 45 CA to 45 CR
(Full angulation capability determined by patient position)

In the side position (+90 / -90 degrees position, L-arm perpendicular to patient table):
The depth of the C arm is 105 cm
The stand provides fully motorized fast movements with variable and configurable maximum speed. Coupled to the BodyGuard detection system, it allows a very high patient throughput, supporting the busiest schedules.
Variable C-arm rotation speed, up to: 25 degrees/s
Variable C-arm angulation speed, up to: 25 degrees/s
The variable source image distance between focus and Dynamic
Flat Detector input screen is 89 to 123.5 cm

Lateral stand
A motorized lateral ceiling suspended double C-arc stand.
It allows longitudinal manual and motorized movement on ceiling rails for convenient parking.
Operation is safe and secure due to collision protections on X-ray tube, Flat Detector and inside the double C-arc.
The double C-arc enables:

motor-driven rotation from frontal to left oblique projections of maximum 90 degrees
motor-driven angulation in the cranial or caudal direction of maximum 45 degrees
The double C-arc allows these angulations at any rotation
manual- or motor-driven axial movement of the Flat Detector
assembly for adjusting the patient/flat detector input screen
distance focus/flat detector input screen distance 87.5-130.3 cm.
The speed of the motorized angulation/rotation movement is 8 degrees/sec whenever the double C-arc is out of its parking position.
Parking of the lateral C-arc stand can be done both manually and motorized, over the full range, with electronic autostop positions.
Using this motorized movement makes positioning in the isocenter easy and accurate. It also features comfortable, single operator control of stand parking.
The motorized longitudinal movement is max 12 cm/sec over max 315cm.

Patient support
The Standard Table provides feather-light manual float movement, even for heavy patients, thanks to the unique mono-bearing technology. The long flat carbon fiber tabletop provides ample space to place e.g. catheters and guidewires.
It comprises:
- Table top length of 319 cm, width of 50 cm
- Metal-free overhang 125 cm
- Floating table-top movement of 120 cm longitudinal and 2 x 18 cm transversal
- Motorized height adjustment from 74 - 102 cm
- Maximum patient weight 250 kg plus 500 N in any longitudinal position of the table top
Table accessory set includes:
- 3 rail accessory clamps.
- A patient mattress. A slow recovery foam mattress with a density of 58 kg/m3. The mattress has a thickness of 5 cm and adapts to the body shape of the patient. It makes the pressure being divided equally and it recovers when the patient is taken off the mattress. The light blue cover is easy to clean. Patients are more relaxed due to the comfort of this mattress, supporting long interventional procedures.
- Drip-stand.
- Set of cable holders.
- Patient straps

-Set of elbow supports

-Head support

-Arm support board

System and Table APC

Helps to save time and manage X-ray dose with automatic positioning
Positioning the X-ray system to visualize relevant anatomy from different perspectives can involve a great deal of time and many scout images during interventional procedures. To help save time and manage X-ray dose while working, the Automatic Position Controller (APC) provides an easy way for interventional team members to store and recall stand-related positions.

2. X-ray Generation
The Azurion 7 B20/15 comprises an integrated dedicated X-ray system, micro-processor controlled Certeray CFD generator based on high frequency converter technique. The user

interface control of this X-ray Generator is incorporated in the touch screen module, review module, and the on-screen displays.

For each plane, the Certeray CFD generator comprises:
- X-ray generator 100 kW
- Voltage range is 40 - 125 kV
- Maximum current 1000 mA at 100 kV
- Maximum continuous power for fluoroscopy: 2.5 kW for 0.25 hours, 1.5 kW for 8 hours
- Program selection
- pulsed X-ray up to 3.75 , 7.5 , 15 , 30 frames/s for digital dynamic exposures
- pulsed X-ray for pulsed fluoroscopy (3.75 , 7.5 , 15 , 30 frames/s).
- minimum exposure time of 2 ms
- automatic kV and mA control for optimal image quality prior to run to save dose
- optimal X-ray tube load incorporated in the Certeray CFD generator

Frame rate extension to 30 frames per second.

Designed to enhance visualization in complex interventions

Frame rate extension to 30Fr/sec increases the system acquisition speed up to 30 frames per second for cardio studies requiring high-speed imaging.

Specifications

The frame rate extension increases the acquisition speed to 15fps and 30fps with a 1024x1024 matrix.

The Azurion 7 B20/15 includes a Maximus ROTALIX Ceramic tube assembly MRC200+ GS 0407 and cooling unit CU 3101 for cardiovascular systems for frontal plane and for the lateral plane a Maximus ROTALIX Ceramic tube assembly MRC200+ GS 05 08 and cooling unit CU 3101 for cardiovascular systems

The X-ray tube MRC200+ GS 04 07 assembly comprising:
- 0.4/0.7 mm nominal focal spot values maximal 30 and 65 kW short time load
- grid switching at pulsed fluoroscopy
- continuous loadability: 4000 W (at 21 degrees C room temp.)
- application of SpectraBeam dose management
- tube housing ROT 1001 for oil-cooled X-ray tube with thermal safety switch
- cooling unit CU 3000 heat exchanger for use in oil-cooled X-ray tube systems
- high voltage cables

The X-ray tube MRC200+ GS 05 08 assembly comprising:
- 0.5/0.8 mm nominal focal spot values maximal 45 and 85 kW short time load
- grid switching at pulsed fluoroscopy
- continuous loadability: 4000 W (at 21 degrees C room temp.)
- application of SpectraBeam dose management
- tube housing ROT 1001 for oil-cooled X-ray tube with thermal safety switch
- cooling unit CU 3000 heat exchanger for use in oil-cooled X-ray tube systems
- high voltage cables
-

DoseWise program

Philips DoseWise program is a set of techniques, programs and practices built into the Azurion 7 B20/15 system that ensures excellent image quality during each interventional application, while at the same time reducing x-ray dose at every opportunity.

The DoseWise comprises of three building blocks to help reduce x-ray dose without compromising diagnostic quality: system intrinsic, user selection and awareness.

System intrinsic
- optimized fully digital imaging chain in maximizing the utilization and technology of the x-ray generator, x-ray tube, flat detector and image processing.

- customizable EPX protocols to each application according to user preferences for different composition of dose rate, pulse speed, filter setting, and image processing (noise reduction, adaptive contour enhancement, adaptive harmonization)
- built-in SpectraBeam filtering of low energy radiation to optimize image quality and dose efficiency with MRC-GS 0508 X-ray tubes
- pre-filters of 0.2, 0.5 and 1.0 mm CU equivalent can be applied for each plane
- automatic cardiac wedge positioning
- anti-scatter grid, ratio 13:1 in each plane
User selections
- three programmable fluoroscopy modes can be selected from the Imaging UI Each mode has a different composition of dose rate, pulse speed, filter setting, and image processing (noise reduction, adaptive contour enhancement, adaptive harmonization)
- X-ray depth collimator with single semi-transparent wedge filter with manual and automatic positioning.
- Beam Shaping, which means that both shutters and wedges can be positioned on the Last image Hold without the need for X-ray radiation.
- Fluoro Storage, a grab function allows storage and archiving of both a fluoro image or the last 20 seconds (service configurable time) of fluoroscopy run. These images or runs can be archived and reviewed as a regular run.
- removable anti-scatter grids to lower x-ray dose for pediatrics.
User awareness
Radiation Dose Structured Report for collection of dose relevant parameters and settings and export to a DICOM database (e.g. PACS, RIS), according IEC60601-2-43, 2nd Edition.
The reported data can be used for analysis, to further reduce X-ray dose.
On-system monitor display provides and displays body zone specific Air Kerma data (10 zones for cardiac applications) in numeric and graphical bars.
- A graphical bar and numeric displays the actual dose rate (during x-ray) or predictive dose rate (at no radiation)
- Second graphical bar and numeric displays the accumulated Air Kerma dose for the particular body zone of the actual projection
- When the accumulated Air Kerma dose of the particular body zone reaches the critical skin dose level of 2 Gy, it will be indicated on the display and made visible to the x-ray operator.

3. Image Detection
The Azurion 7 B20/15 comprises the following image detection chain for frontal plane and
Frontal imaging chain:
- 30 x 40 cm (11.6 x 16 inch) (48 cm / 18.9 inch diagonal) 8- mode 20" Dynamic Flat Detector subsystem for fluoroscopy and fluorography procedures
- 8 imaging modes are available, 6"/7"/8"/10.5"/13"/14.4"/17"/19"
- The flat detector subsystem features Access, the detector can be rotated over 90 degrees, it moves from portrait to landscape back and forth
- The digital output of the 20" flat detector is 2k*2k image matrix at 16 bits depth for the largest mode
- DQE (Detective Quantum Efficiency) >77 % providing high conversion of X-ray into a digital image, while maintaining a high MTF
- The pixel pitch is 154 x 154 microns

Lateral plane:
- A 26 x 33 cm (10 x 13 in.) diagonal 7 mode Dynamic Flat Detector subsystem for fluoroscopy and cine-fluorography.
- A 6"/7"/8"/10.5"/13"/14.4"/15.2" mode Dynamic Flat Detector
- The digital output of the Flat detector is max 2000 x 1688 matrix at 16 bit depth.
- The pixel pitch is 184 micron by 184 micron
- The DQE(0) is 70%, providing high conversion of X-ray into a digital image, while maintaining a high MTF.

Top performance is achieved by a Dedicated Image Pipeline Processor that has an equivalent capability of more than 8000 MIPS and is designed for video speed image processing.
It includes:
- adaptive contour enhancement at 9 x 9 kernel
- adaptive harmonization enhancement at 192 x 192 kernel
- Xres is an award-winning image processing algorithm. Xres is a multiresolution spatial temporal noise reduction and edge enhancement filter. It exploits the full benefits of the digital detector to enhance sharpness and contrast and to reduce noise in the clinical images.

The Azurion 7 B20/15 has a storage capacity of 100,000 images at matrix size of 1024 x 1024, 10 bit for each plane. A maximum number of examinations is 999, with no limit to the maximum number of images per examination.

4. User Interface
User Interface in Examination Room
The User Interface comprises a variety of User Interface modules in the Examination Room. There is the On-Screen Display, the touch screen module, Viewpad and the control modules.
The On-Screen Display is positioned, depending on configuration, at the bottom of the live and reference monitors or on the left side of the FlexVision monitor 58-inch monitor. The following system information is displayed:
- X-ray indicator
- X-ray tube temperature condition
- Gantry position in rotation and angulation
- Source Image Distance
- Table height
- Table top tilt and cradle angle, if applicable
- Detector field size display
- General System messages
- Selected Frame speed
- Fluoroscopy mode
- Integrated fluoroscopy time
- Skin Dose: dose rate during X-ray and cumulated dose
- Dose Area Product: cumulated dose
- Graphical bars for Body Zone specific accumulated skin dose levels, related to the 2 Gy level (for cardiac applications)
- Stopwatch

Two Touch screen modules
The touch screen module is provided for use at either the tableside or in the control room. Optionally, it is possible to connect in parallel up to three touch screen modules on the system. The touch screen module has a touch screen, which can be operated when covered with sterile covers. The touch screen module allows control of (depending on configuration):
- 3rd party equipment (e.g. CX50, Interventional Tools, EchoNavigator, DoseAware)
- Monitor layout (FlexVision, switchable monitors)
- X-Ray settings (Collimation)
- Geometry (Projections and Table)
- Viewing (Series selection and image Processing)
- Quantitative Analysis (optional) - User can start QA from the touch screen module

Viewpad
The Viewpad contains the preprogrammed function settings. The system is provided with two Viewpads. The following functions are provided:
- Series and image selection
- Study cycle
- Study overview

Line #	Part #	Description	Qty	Each	Price

- Store to Reference image file
- Copy image to photo file
- Recall reference images, which means switching control of Viewpad function from life to reference monitor
- Laser pointer, intended to point at regions of interest on the image monitors
- LED indication of laser pointer on/off and battery low

Control modules.
The geometry control module can be positioned at three sides of the patient table, while keeping the button operation intuitively logical. The control module biplane provides the following functionality:
- Tabletop float
- Table height position
- Table tilt angle if function is applicable
- Source Image Distance selection
- Gantry positioning (both frontal and lateral)
- Gantry rotation in an axis perpendicular to the floor (both frontal and lateral)
- Geometry reset button, which resets stand and table to a factory-default starting position
- Emergency stop button
- Execute button of the Automatic Positioning Control (APC) if applicable
- Unlocking button for table pivot function (if option is installed)
- Table tilt and cradle controls (if option is installed)
The imaging control module can also be positioned at three sides of the patient table. It provides the following functionality:
- Fluoroscopy Flavor selection defined per setting
- Shutters and Wedge positioning (for both frontal and lateral plane)
- Manual or automatic semi-transparent wedge filter
- Fluoro Storage
- Selection of the Detector field size
- Reset of the fluoroscopy buzzer
- Roadmap Pro activation if function is available

The control module is provided with a protection bar. This removable bar protects the buttons from unintended control.

Pan Handle

The pan handle is an optional extension of the control possibilities for floating movements of the table top in cardio vascular and neuro systems

Key benefits
• Flexible positioning during cardio and neuro procedures

Flexible positioning during cardio and neuro procedures
To allow more flexible positioning during cardio and neuro procedures, the pan handle option can be used to perform floating table movements. The pan handle provides a solid grip of the tabletop and can release and apply the tabletop brakes. It can be attached anywhere along the tabletop and accessory rails without affecting the floating range.
Specifications
Pan handle with cable and connector
Table-top attachment clamp
Accessory-rail attachment clamp

Line #	Part #	Description	Qty	Each	Price

User Interface in Control Room
With Philips Azurion the control room comprises of a review module, an acquisition monitor and a review monitor. The acquisition and review functions are controlled by a single keyboard and mouse.
The review module offers the basic functions for reviewing images on the acquisition monitor. The most prominent functions can be controlled by the push of a button. The review module comprises the following functionality:
- Power on/off
- File and series cycle
- File, Series, and Image stepping
- Series and file overview
- Reset fluoroscopy buzzer
- Enable/disable X-ray
- Disable Geometry movements

The acquisition monitor is intended to follow live case in the ER. The live images for the frontal and lateral channels are always synchronized and displayed side by side on one monitor. System information is displayed on the bottom of the monitor:
- Stopwatch and Time
- System guidance information
- Dose Area Product (DAP), Cumulative Skin Dose, Skin Dose rate as well as graphical bars for Body Zone specific accumulated skin dose levels
- Frame speed settings, fluoroscopy mode, and accumulated Fluoroscopy time
- Exposure and fluoroscopy settings as Voltage (kV), Current (mA) and time (ms)
- Geometry information as rotation, angulation, and SID

Patient Administration
In the scheduling page it is possible to add new patients (either querying from RIS/CIS or by creating patient locally). The patients can be listed and selected per date, physician, and intervention type. Previous DICOM patient studies can be uploaded with the DICOM Query Retrieve function in the Philips Azurion system. Patient management protocols are flexible and allow for multiple studies to be selected under one patient identification number. This means that new studies can be appended to an earlier patient file. Furthermore, each study can contain multiple examinations to allow for split administrative purposes. Each examination contains multiple files, like acquisition file, reference file, and photo file.

ProcedureCards
ProcedureCards provide the information of room and patient preparation for each individual physician. ProcedureCards are customizable per setting and allow each physician to provide their own room protocols. ProcedureCards with Checklists and Protocols is intended to make hard copies of the protocol instructions redundant.

Acquisition
The acquisition page contains information on the currently selected patient and allows control of the acquisition settings.

Quantitative Vascular Analysis

Key benefits
• Allows quantitative assessment of different size vessels such as aortic and peripheral
• Aids confident decision making for device selection, approach angles and follow-up
• Designed for efficiency with single click functions and fast results

Easily obtain objective assessment of aortic and peripheral vasculature
To support decision making and allow quantitative assessment of vasculature during vascular interventions, the 2D quantitative vascular analysis option supports quantification such as aortic and peripheral artery dimensions of about 5 to 50 mm from 2D angiographic images. With one click, the relevant segment is detected and a visualization of the obstruction, healthy vessel, reference diameter, stenosis diameter and plaque area is created.

Specifications:
• Automated vessel segmentation
• Diameter measurement along selected segment
• Automated obstruction analysis
• Stenosis diameter, stenosis length
• % stenosis diameter, % stenosis area
• Automated and manual calibration routines
• Store result page

Analysis of the targeted vessel segment has been simplified with the single click function. Position the mouse on or close to the stenotic area and click once to detect the relevant segment. The visualization shows the obstruction, healthy vessel, reference diameter, stenosis diameter and plaque area.

Reviewing
The review page allows for reviewing of patients:
- Previous examination cases
- Review of other DICOM XA or DICOM SC studies.

Archiving
Clinical cases can be archived to a CD/DVD, USB or a PACS. The archive process can be completely automated and customized with settings. Parameters like multiple destinations, archive formats can be selected to the individual needs and wishes for programming under the settings.

The review monitor is a 24 inch color TFT-LCD medical grade monitor.
The Review monitor can be used while acquisition is being performed in the examination room and has the following features and possibilities:
- Step through file, series, or images
- File, and series overview
- Contrast, brightness, and edge enhancement settings
- Flagging of series or images for transfer
- Applying text annotation in images
- DICOM printing if available
- Executing Quantitative Analysis Packages if available
- Subtraction functionality if available

This system is delivered with printed instructions for use and/or electronic instructions for use, as well as a quick start leaflet. A printed paper instructions for use can also be ordered at no additional cost.

5. Viewing
Viewing in the Examination room
The Azurion 7 B20/15 system comes with two 27 inch color medical grade LCD monitors for clinical image display in the Examination room. These LCD monitors are intended for viewing in the examination room and are designed for medical applications.
One of the monitors is used for viewing of frontal and lateral live images. The other monitor serves as the frontal and lateral reference displays. Selection and storing of live to reference monitors is controlled by the infra-red remote-control Viewpad.

The On-Screen Display provides status information on stand rotation-angulation, table height, display of system messages, X-ray tube load status, selected fluoroscopy mode, selected detector Field of View, and both the rate and accumulation of the dose area product and Air Kerma dose.
The main characteristics are:
- 27 inch color TFT-LCD display
- Native format 2560x1440 Quad HD
- 10 bit gray-scale resolution with gray-scale correction
- Wide viewing angle (approx. 178 degrees)
- High brightness (max 500 Cd/m2, default 350 Cd/m2)
- Push buttons for control functions on front
- User programmable and standard reference setting
- On Screen Display
- Internal selectable lookup table for gray-scale transfer function
- Internal power supply (110-240 VAC)
- Integrated LCD protection screen
Unless otherwise stated a flat monitor ceiling suspension for 2 widescreen monitors (2F MCS) is included. MCS includes motorized height adjustment. The Ceiling suspension allows flexible monitor positioning over a range of about 360 x 300 cm.

Viewing in Control room
DICOM compatibility
The Azurion 7 B20/15 system includes the DICOM Image Interface which enables the export of clinical images to a DICOM destination like a CD-Medical station or a PACS server.
The export formats are based on DICOM 3.0 protocols.
The system exports clinical studies in Cardiac DICOM XA Multi-Frame or DICOM Secondary Capture formats.
The DICOM Image Interface transfers through its fast Ethernet link, making images available on-line within seconds.
The archive process can configured by Settings. The images are sent out either in the background, or manually upon completion of the examination.
The export format is configurable in 512x512 or 1024x1024 matrix in 8 or 10 bit depth. The examination can be sent to multiple destinations for archiving and reviewing purposes.
The DICOM Image Interface provides DICOM Storage and DICOM Storage Commitment Services.
The DICOM Query/Retrieve function allows older DICOM XA MF and DICOM SC studies to be uploaded in the system.
Furthermore, additional information can be appended to a study while keeping the patient identification the same.

Remote Intercom

Data Integrity UPS
Uninterruptable Power System (UPS)
Ensures data integrity
A power failure of the hospital mains during an intervention can cause loss of data. If this occurs, the single phase Uninterruptable Power System (UPS) enables a proper shut-down of the X-ray system processor units.
Specifications
In case a (local) three phase UPS is used, the single phase UPS is not delivered.

Remote service
Access to the system from a Remote location is possible via network or modem connection.

Remote access to a system can shorten the time needed for e.g. changing system settings or problem diagnosis.

Clinical Education Program for Azurion System:

The purchase of the Azurion System includes a StartRight entitlement pool that allows for the customized delivery of educational events to improve staff time to proficiency, knowledge on system features, and improve overall lab efficiency. For new users, the recommended series of educational events includes:

Essentials OffSite Education: Philips will provide up to two (2) Cardiovascular Technologists, Registered Technologists, Registered Nurses, or other system operator as selected by customer, with in-depth didactic, tutorial, and hands-on training covering basic functionality and work-flow of the cardiovascular imaging system. In order to provide trainees with the ability to apply all fundamental functioning on their system, and to achieve maximum effectiveness, this class should be attended no earlier than two weeks prior to system installation. This twenty-eight (28) hour class is located in Cleveland, Ohio, and is scheduled based on your equipment configuration and availability. Due to program updates, the number of class hours is subject to change without notice. Customer will be notified of current, total class hours at the time of registration. This class is a prerequisite to your equipment handover OnSite Education. CEU credits may be available for each participant that meets the guidelines provided by Philips. Please refer to guidelines for more information. In the event that an EP Navigator workstation has also been ordered, the offsite training course will be tailored to focus on the electrophysiology functionality of the FD system and the EPN workstation. Travel and lodging are not included, but may be purchased through Philips. It is highly recommended that 989801292102 (CV Full Travel Pkg OffSite) is purchased with all OffSite courses

Initial Handover OnSite Education: The primary Philips Education Specialists will provide twenty-eight (28) hours of education for up to four (4) students, selected by customer, including technologists from night/weekend shifts if necessary. Students should attend all 28 hours, and must include the two OffSite education attendees. CEU credits may be available for each participant that meets the guidelines provided by Philips. Please refer to guidelines for more information. Note: Site must be patient-ready. Philips personnel are not responsible for actual patient contact or operation of equipment during education sessions except to demonstrate proper equipment operation. It is highly recommended for systems that are fully loaded or for customers with a large number of staff members to also purchase 989801292099 (CV Add OnSite Clin Educ 24h).

FollowUp OnSite Education: Philips Education Specialists will provide sixteen (16) hours of education for up to four (4) students, selected by customer, including technologists from night/weekend shifts if necessary. Students should attend all 16 hours, and must include the two OffSite education attendees. CEU credits may be available for each participant that meets the guidelines provided by Ph ilips. Please refer to guidelines for more information. Note: Site must be patient-ready. Philips personnel are not responsible for actual patient contact or operation of equipment during education sessions except to demonstrate proper equipment operation.

Assessment OnSite Year 1: The primary Philips Education Specialist will perform a two day onsite assessment at the customer site on or close to the first anniversary of the Initial Handover. The Specialist will assess through various means not limited to; physical observation of procedure

workflow, tool usage data analysis and staff interviews. The Specialist will then review findings with department head and make recommendations thereof. The Specialist may perform refresher training if required.

Education expires one (1) year from installation date (or purchase date if sold separately). Ref#2963392963402963412963420-20170209

3   **NNAE049   XperCT OnSite Clin Ed   1

Clinical Education Program for XperCT
CV XperCT Handover OnSite Education:
Philips Education Specialists will provide eight (08) hours of education for up to four (4) students, selected by customer, including technologists from night/weekend shifts if necessary. CEU credits may be available for each participant that meets the guidelines provided by Philips. Please refer to guidelines for more information. Note: Site must be patient-ready. Philips personnel are not responsible for actual patient contact or operation of equipment during education sessions except to demonstrate proper equipment operation.
Education expires one (1) year from equipment installation date (or purchase date if sold separately). Ref# 335-100615
This training is provided only with the purchase of XperCT. If the option is not ordered, training will not be provided.

4   **NNAE048   XperGuide OnSite Educ 08h   1

Clinical Education Program for XperGuide
CV XperGuide Handover OnSite Education:
Philips Education Specialists will provide eight (08) hours of education for up to four (4) students, selected by customer, including technologists from night/weekend shifts if necessary. CEU credits may be available for each participant that meets the guidelines provided by Philips. Please refer to guidelines for more information. Note: Site must be patient-ready. Philips personnel are not responsible for actual patient contact or operation of equipment during education sessions except to demonstrate proper equipment operation.
Education expires one (1) year from equipment installation date (or purchase date if sold separately). Ref # 336-100316
This training is provided only with the purchase of XperGuide. If the option is not ordered, the training will not be provided.

5   **FCV0017   CS universal cable carrier   2 $265.50 $531.00

• Increase workflow flexibility
Increase workflow flexibility
To accommodate different room layouts, this option provides an additional monitor cable carrier for the clip rails on the ceiling rails. The extra monitor cable hose rail is mounted between the monitor ceiling carriage and the ceiling inlet. This can be used in situations where the ceiling inlet cannot be placed in the middle of the clip rails due to room restrictions. This item is not suitable for mounting the monitor ceiling carriage or the stand hose.

6   **FCV0588   Isolated Wall Connection Box   10 $1,480.50 $14,805.00

Isolated Wall Connection box to support the display of an external video source on a monitor in the examination room.

Key benefits
- Stream video from other modalities on the interventional X-ray suite.
- Connect external video in the exam room

Line #	Part #	Description	Qty	Each	Price

Easily stream video to other locations
Many interventional facilities use video to record and stream images from other modalities on the interventional X-ray suite for training or presentation purposes. The Video Wall Connection Box facilitates connection of the video source via a standard DVI cable/connector and lossless transfer of the video signal over the approximate 30 meter long cable. It can be mounted in the examination room or in the control room, depending on the location of the video source.

Specifications
The quantity of the VWCB's has to be calculated as follows:
For each video signal via MultiVision: 1 VWCB (max = 4)
For each video signal to FlexVision XL on Cardio System: 1 VWCB (max = 9)
For each video signal to FlexVision XL on Vascular System: 1 VWCB (max = 8)
For each 3rd party video signal directly connected to an LCD in the MCS: 1x VWCB.
Note:
No VWCB is required in case a video signal is connected directly to a dedicated LCD from the following sources:
1) Live/ref Slaving
2) Interventional HW (XtraVision), IntelliSpace Portal, Philips Xcelera (only if workstations are powered by Philips X-ray system)
3) XperIM

Line #	Part #	Description	Qty	Each	Price
7	**NCVD187	ClarityIQ...	1	$178,020.00	$178,020.00

Low dose across clinical areas, patients and operators.

Key benefits
• High-quality imaging at low dose levels
• Enhanced work environment for staff through active management of scatter radiation
• Expands treatment options – enables longer procedures to treat obese and high-risk patients with confidence

See with confidence every time
Interventions are becoming increasingly complex, which lengthens fluoroscopy time and increases the need for high resolution imaging. New devices can be more difficult to visualize, making it harder to position them precisely. The prevalence of patients with a high BMI can also require increased dose levels to visualize anatomy. All of these factors inspired us to completely redefine the balance in interventional X-ray with Azurion.

Azurion with its unique ClarityIQ technology gives you exceptional live image guidance during treatment. What's more, you can confidently manage low X-ray dose levels without changing your way of working. In short, you can see what you have to regardless of patient size.

Specifications
ClarityIQ technology is the foundation of Philips X-ray systems with Azurion. It offers:
- Noise and artefact reduction, also on moving structures and objects
- Image enhancement and edge sharpening
- Automatic real-time patient and table motion correction on live images
- A flexible digital imaging pipeline from tube to display that is tailored for each application area
- Over 500 clinically fine-tuned system parameters making it possible to filter out more X-ray radiation and use smaller focal spot sizes and shorter pulses with the grid switching technology of Philips MRC tube and accompanying generator
Pulsed X-ray for pulsed fluoroscopy
25 | 12.5 | 6.25 | 3.125 | 2.5 | 1.25 | 0.625 img/s

Line #	Part #	Description	Qty	Each	Price
8	**FCV0824	video WCB on rear side 1st MCS	2	$5,706.00	$11,412.00

Isolated Wall Connection box on the rear side of the monitor ceiling suspension to support the display of an external video source on a monitor in the examination room.

Key benefits
• Easily connect external video in the exam room
Specifications
A wall connection box to connect external video (input only), USB and Ethernet. One or two WCB's (option) can be attached on the rear side of the 1st MCS with a bracket. A cable box (also attached to rear side of 1st MCS) can be used to store connected equipment cables. A maximum of two WCBs/cable boxes can be attached.

Line #	Part #	Description	Qty	Each	Price
9	**FCV0812	live/ref slaving for ER	2	$5,742.00	$11,484.00

Live/ref slaving for Exam Room.

Key benefits
• Easily display any data or clinical information needed to work efficiently
Simplify workflow with flexible viewing control
Having patient data and clinical information easily available on screen can enhance decision making and efficiency during interventions. The live/ref slaving will enable the option to slave the Live and Ref video source from the X-ray system. The total amount of live/ref slaving that can be selected is max 5, minus the number of FCV0807 Live/ref slaving for CR.

Specifications
Live/ref slaving for ER is possible:
- On Philips MCS (additional monitor excluded from this option)
- In combination with FCV0519 1 or 2 MCS from Skytron/Steris

Line #	Part #	Description	Qty	Each	Price
10	**NCVD062	optional ref biplane	1	$4,959.00	$4,959.00

Additional Reference 3 and Reference 4 viewport

Key benefits
• Easily display any data or clinical information needed to work efficiently
Simplify workflow with flexible viewing control
Having patient data and clinical information easily available on screen can enhance decision making and efficiency during interventions. Optional ref biplane offers an additional video output of the X-ray system offering an additional Ref3 and Ref4 viewport on one LCD monitor. Combined with the Dual Fluoro option, this enables users to zoom live images during acquisition, while having the Dual Fluoro image of the frontal channel visible on the Ref3 viewport and the Dual Fluoro image of the lateral channel visible on the Ref4 viewport.

Line #	Part #	Description	Qty	Each	Price
11	**NCVA101	peripheral X-ray filter	1	$1,309.50	$1,309.50

• Obtain uniform density of lower peripheral areas

Enhance consistency of lower peripheral images
To help clinicians obtain consistent images of lower peripheral anatomy, this option provides a set of flexible X-ray filters. They provide uniform density in angiographic examinations of the lower peripheral area.

Line #	Part #	Description	Qty	Each	Price
12	**NCVB168	3D Roadmap	1	$31,630.50	$31,630.50

3D Roadmap overlays real-time 2D fluoroscopy images on a 3D reconstruction of the vessel tree

Key benefits
• Provides full 3D view to enhance navigation of guide wire and catheter through complex vascular structures
• Helps to overcome the limitations of 2D roadmaps in visualizing overlapping vessels
• Offers a high level of precision thanks to real-time compensation for gantry, table, and small patient movements

Live 3D image guidance
Diagnosing and treating vascular diseases without a clear picture of the relationships between overlapping vessels is a daily challenge for interventionists. 3D Roadmap was developed to overcome the limitations of 2D roadmap images in visualizing overlapping vessels and eliminate the need to perform multiple DSA runs. This technique offers a real-time roadmap alternative that provides dynamic 3D image guidance for navigating through vascular structures anywhere in the body.

3D Roadmap overlays real-time 2D fluoroscopy images on a 3D reconstruction of the vessel tree acquired with 3D-RA or XperCT, both available on the X-ray system. The resulting roadmap shows the progress of a guide wire, catheter, or coil in real-time. It is designed to improve visualization and navigation for complex neuro, vascular, and oncology interventions.

Specifications
3D Roadmap is based on the visualization of the vessel tree from 3D-RA acquisitions, activated with one button touch at tableside.

Viewing:
Table side control: bidirectional link between the X-ray system and 3D Roadmap,
3D Automatic Position Control,
3D Follow C-arc,
The 3D roadmap provides the freedom to change:
The angulation of the C-arc,
The rotation of the C-arc,
The Field of View,
The Source to Image Distance,
Landmarking,
3D blending,
WW/WL settings,
Store and review runs,
Store snapshots and movies.

Transfer/ export to:
Optional Hard Copy unit (DICOM Print)
DICOM compatible device, supported are DICOM XA, DICOM SC, DICOM CT and DICOM 3D
Any PC in a standard PC compatible format (JPEG,AVI)
One or multiple DVD's, CD-ROM(s)
USB device.

Line #	Part #	Description	Qty	Each	Price
13	**NCVA695	FD Rotational Angio	1	$19,935.00	$19,935.00

Realtime 3D impressions of complex vasculature

Key benefits
• Use 3D imaging to quickly determine the projection angle for treatment in complex vascular interventions, surgery and radiotherapy
• Supports assessment of vascular pathologies for diagnostic and therapeutic decisions.

Line #	Part #	Description	Qty	Each	Price

Revealing hidden structures

The complexity of interventional procedures lies in the fact that every person's pathology is unique. Visualization in three dimensions is therefore vital to aid decision making by the clinician. Rotational angiography provides real-time 3D impressions of complex vasculature and the coronary artery tree. Rotational Angio can be used to quickly determine the projection angle for treatment.

Specifications

Rotational Angio acquires multiple projections with just one contrast injection via a fast rotational scan of the region of interest. A rotational scan is possible both with the X-ray systems in the side position (ceiling mounted systems) and in the head position, providing the flexibility to perform procedures virtually from head to toe.
C-arm in side position:
Max. rotation Speed: 30 degrees/s
Max. rotation Angle: 180 degrees
C-arm in head position:
Max. rotation Speed: 55 degrees/s
Max. rotation Angle: 240 degrees
Max. Frame speeds are given by the frame speed specifications of the system configuration.
The very high movement speed allows using less contrast, whereas the very wide rotation range provides a complete evaluation of the anatomy.
A contrast run can be followed up with a mask run, to allow image/run subtraction.
The stand is designed for a very high mechanical stability. It offers precise positioning and high reproducibility, assuring you of high quality images and excellent subtraction studies. Rotational Angio results are available on the X-ray system.
Operation of Rotational Angiography is straight forward: the procedure is selected, set up and executed virtually in a matter of seconds, supporting high patient throughput.
A set of dedicated acquisition programs is available on the touch screen module and can be selected at the touch of a button. The Rotational Angio is controlled from the exposure hand- or footswitch.

Line #	Part #	Description	Qty	Each	Price
14	**NCVA851	Swivel for table base.	1	$17,388.00	$17,388.00

• Simplifies patient positioning
• Easy patient transfer

Simplifies patient positioning

The swivel option with pivot movement allows you to easily move the table to reach upper and lower peripherals for angiographic and interventional procedures. Swivel the table from side-to-side or pivot the table on its vertical axis. The table moves with less friction, making it easier to move larger patients. A secure mechanism locks the tabletop in place to prevent it from moving.

Line #	Part #	Description	Qty	Each	Price
15	**NCVD064	extension to FlexVision Pro	1	$37,579.50	$37,579.50

Extension to Flexvision large 58 inch high resolution LCD for exam room, enabling flexible screen lay outs and full control (seamless mouse) of up to 11 external sources including third party systems.
Key benefits
- Full control at table side of all applications with seamless mouse control or via touch screen module
- Full flexibility of screen layouts (live resize, drag and drop, unlimited number)
- To simplify and standardize system set-up for your FlexVision Pro, your personalized layout will come up automatically with ProcedureCards.

Easy tableside control
With FlexVision Pro, user can control FlexVision and video sources on FlexVision through wireless mouse in Examination Room as well as virtual keyboard and touchpad on the touch screen

Line #	Part #	Description	Qty	Each	Price

module in the Examination Room. An operator can resize images and adjust the screen layout during the procedure without going into configuration.

Specifications
Full control at table side of all applications in the interventional lab (view and control) with a single wireless mouse or with a Touch Screen Module
• Integration: control of up to 11 external sources
• Possibility to configure unlimited flexible screen layouts
• Screenshots: with single click all displayed inputs can be captured
• Live resize the video window and adjust the screen layout during the procedure without going into configuration
• Operate all the video sources displayed on the monitor using the wireless mouse at tableside
• Mouse and keyboard function on the touch screen module (TSM) to control (external) sources

| 16 | **NCVC795 | 3D-RA R6 | 1 | $44,167.50 | $44,167.50 |

3D-RA
3D-RA (3D Rotational Angiography) provides extensive 3D visualization of anatomy and vessels.

Key Benefits
• Provides 3D imaging in the interventional suite to enhance decision making and guidance
• Supports accurate assessment of vascular pathologies by providing high-resolution 3D reconstructions of small vessels and lesions
• Enhances understanding of vascular anatomy for interventional treatment planning and to verify procedural outcome

Enhancing 3D functionality
Visualizing the complex spatial relationship between critical and branching vessels often involves several sequential DSA acquisitions and radiation dose for the patient. 3D-RA (3D Rotational Angiography) provides extensive 3D visualization of anatomy and vessels based on a single contrast-enhanced rotational angiogram. Its high-resolution 3D reconstructions provide critical information about depth and the relationship of one vessel to another to support the accurate assessment of anatomy and vasculature.

With 3D-RA, complex anatomy such as aneurysms or tortuous vessel structures can be assessed in three dimensions. This enhances the chances of delineating the neck of aneurysms, for example, and its shape and relationship to adjacent arteries.

Combined with the unique whole body coverage of the X-ray system, specifically designed for 3D imaging, 3D-RA can cover cerebral, abdominal, and peripheral vasculature as well as other anatomy.

Specifications
Image Acquisition
Image acquisition is performed with the Rotational Angiography feature of the X-ray system with the flexibility to position the C-arm in either head or side (not F12) position.
C-arm in head position: scan range of 240 degrees with a rotation speed up to 55 degrees/sec.
C-arm in side position: scan range of 180 degrees with a rotation speed up to 30 degrees/sec.

3D Vessel Reconstruction
The rotational run is automatically transferred and displayed as a 3D vessel model: with the Real-Time digital link (option) 120 images are reconstructed into a 3 dimensional model within seconds. Additional reconstructions, using the Reconstructive Zooming Technique, can be performed as well.

Workflow
Automated 3D-RA process from 3D acquisition to 3D Viewing,

Line #	Part #	Description	Qty	Each	Price

3D at touch screen module (option),
3D Automatic Position Control (3D-APC),
3D Follow C-arc.

Calibration
3D-RA calibrations are performed by Philips Customer Support.
3D-RA calibration data are stable over at least 6 months' time.

Viewing
Real Time user interface.
Philips' CRM (Contrast Resolution Management) Technology.
Image rendering:
Volume/Surface Rendering,
MIP,
Endoscopy,
SUM (pseudo X-ray image)
Gradient rendering,
Cut-plane function,
Orthoviewer,
MPR (Multi-Planar Reformatting),
SpineView,
5 distance measurements calculated in the same volume, including "Quick measurement".
Volume calculation
Automated Vessel Analysis (AVA),
Computer Assisted Aneurysm Analysis (CAAA),
Catheter tip shape simulation,
Virtual stenting,
Annotation,
Interpolative Zoom
Reconstructive Zooming Technique,
Subtraction of reconstructed volumes,
Automatic Voxelshift,
Set grey values WW/WL,
Store/Recall of user defined projections.

Archiving
Transfer to:
Optional Hard Copy unit (DICOM Print),
DICOM compatible device, supported are DICOM XA, DICOM SC, DICOM CT and DICOM 3D,
Any PC in a standard PC compatible format (JPEG, AVI),
One or multiple DVD's, CD-ROM(s),
USB device.

3DRA on TSM

Key benefits
• Designed to enhance efficiency during procedures
• Perform a 3D-RA scan without leaving the exam room
Table side operation of 3D-RA
To enhance efficiency in the interventional or surgical room during procedures, the 3D-RA (3D Rotational Angiography) on touch screen module option allows physicians to perform 3D-RA scans at the table side. 3D-RA provides extensive 3D visualization of anatomy and vessels in just four seconds based on one rotational angiography run and one contrast injection. Its high-

Line #	Part #	Description	Qty	Each	Price

resolution 3D reconstructions provide critical information about depth and the relationship of one vessel to another to support the accurate assessment of anatomy and vasculature.

Specifications

From the 3D-RA menu on the touch screen module, user can rotate, translate, and take snapshots of images. Views can be stored and recalled. User can select 3D-APC (3D Automatic Position Control) and follow stand mode.

Other 3D-RA functions on the touch screen module:
• Start mouse mode
• Segmentation (window-width/window-level control)
• 3D zoom control
• Recall Anterior-Posterior view

| 17 | **NCVD073 | SmartMask Biplane | 1 | $16,632.00 | $16,632.00 |

Key benefits
• Simplifies roadmap procedures by overlaying fluoroscopy with a selected acquired image.
• Enables roadmap procedures to manage radiation dose and contrast media by selecting an image from an acquired series as a mask image.

Supports navigation during interventions without the need of additional contrast media.
SmartMask simplifies roadmap procedures by overlaying fluoroscopy with a selected acquired image in the Live X-ray window.

Specifications
Alternative to the roadmap Vessel phase, the user can directly select an image from any stored run and use it as the VesselMask ('SmartMask') for the Device phase.

| 18 | **NCVD138 | table tilt option | 1 | $19,017.00 | $19,017.00 |

Table tilt option provides precise imaging of contrast medium, blood, or objects in the body.

Key benefits
• Tilts the table to support gravity oriented and puncture procedures
• Keeps the region of interest in the isocenter of rotation and angulation
• Allows more precise imaging of contrast medium, blood, or objects in the body

Precise imaging during gravity oriented and puncture procedures
To obtain high quality results and avoid re-takes during gravity oriented or puncture procedures, it's important to keep the region of interest centered at all times. The tilt option allows you to tilt the table. As the table tilts, the X-ray beam automatically adapts to the movement to keep the region of interest in the isocenter of rotation and angulation of the stand. As a result, your region of interest always remains centered to allow more precise imaging of contrast medium, blood, or objects in the body.

The table floats even when tilted, and the region of interest can be followed by panning the tabletop. When combined with the Bolus Chase option, the table tilt option enables phlebography to be performed with a head-up tilted patient.

Specifications
• Motorized table height from 78.5 - 103.5 cm
• Maximum tilt range: -17 degrees (head down) to +17 degrees (head up).
• Tilt speed: 2 degrees/sec
• Automatic safeguarding system with manual override
• Panning range in tilted plane: equal to the standard tabletop specifications (longitudinal 120cm, lateral 36cm)
• Easy to use controls

| 19 | **NCVB845 | XperGuide | 1 | $36,648.00 | $36,648.00 |

Line #	Part #	Description	Qty	Each	Price

XperGuide provides live 3D needle guidance.

Key benefits
• Shows live advancement of needle for extra guidance
• Requires less X-ray dose than regular CT scans
• Can reduce procedure time significantly compared to regular CT interventions

Perform needle interventions in the angio suite
Having advanced live image guidance tools on your X-ray system can bring new applications to your angio suite. XperGuide provides live 3D needle guidance to support a wide range of non-vascular image-guided needle procedures. Virtual needle paths are created on an XperCT dataset or on the previously acquired CT or MR dataset. XperGuide overlays the real-time 2D fluoroscopy images with the 3D volume of XperCT, CT, or MR to visualize the actual needle path versus the virtual path previously planned.

By using an X-ray overlay with CT-like imaging to guide needle interventions, XperGuide can shorten procedure times significantly and support physicians in reducing risks during procedures.

Specifications
The volumetric dataset can be viewed in any slice direction.
A wide range of gantry projections can be used to define the needle path.
Path planning can be done:
• By drawing a virtual needle path on an XperCT, MR or CT slice
• By defining entry and target points on different XperCT, MR or CT slices
• By defining a help line on a 3D volume

The calculated virtual needle paths can be viewed on the XperCT, MR or CT slices, to verify if this path is feasible.
XperGuide supports planning of multiple needle trajectories.
During the needle procedure, XperGuide is fully controlled at tableside.
When XperGuide is active, guidance is automatically active when the fluoro pedal is pressed. The gantry can be positioned in the calculated gantry positions or controlled manually.
The XperGuide images (live 2D fluoro projected over the XperCT, MR or CT volume) will follow the gantry projections.
At table side, XperGuide adapts in real-time to the following parameters:
• Changes in the angulation of the C-arm
• Changes in the rotation of the C-arm
• Changes in the field of view
• Changes in the source image distance

XperGuide runs are stored in the same patient file as all other patient related data. This data can be reviewed at any time.
XperGuide runs can be sent to any optional DICOM compatible device (supported are DICOM XA, DICOM SC, DICOM CT and DICOM 3D), any PC in a standard PC compatible format (JPEG,AVI) and stored/archived on:
• A PACS systems as DICOM Secondary Capture images or movies
• USB device
• One or multiple DVD's, CD-ROM(s) for easy archiving
• Hard copy via the (DICOM Print) protocol

Line #	Part #	Description	Qty	Each	Price
20	**NCVD032	FlexVision XL HD + 2 LCD's	1	$107,442.00	$107,442.00

FlexVision XL HD is an integrated viewing solution designed to give you full control over your viewing environment which brings High Definition viewing.
This FlexVision XL HD is delivered with two 27 inch high brightness color medical grade LCD monitors. The monitors can be mounted on top side or on rear side of the MCS.

Key benefits
• Easily access multiple, up to 8, video inputs (including third party systems) video inputs to inform decision making during procedures
• Create custom display templates to support diverse procedures
• The screen layout of the FlexVision XL HD can also be changed from the control room
• Enlarge images to reveal more details and support comfortable working positions

Diagnostic information easily made available at table side
In today's interventional setting, as you perform more complex procedures with smaller devices in complex anatomy, you rely on various types of diagnostic information to guide you. To inform decision making in the exam room, Philips offers an advanced digital workspace called FlexVision HD. You can display multiple images in a variety of custom layouts on a large, high-definition LCD screen. Zoom in and out to enhance fine details, while maintaining an overview of all information. Create custom display templates for specific procedures/physician preferences to easily support diverse procedures.

Specifications
FlexVision XL HD offers:
• Native resolution of FD20 can be displayed.
• Sharp images at full size without zoom
• High Definition display at native resolution for ultimate detail
• Up to 2k*2k image display fully integrated
• Enhanced small vessel visualization

1. DVI video composition unit.
The DVI video composition unit allows the user to direct and switch the video output of all connected medical equipment to specific sub windows of the Philips 58-inch color LCD with LED backlight in the Examination Room.
• The DVI video composition unit is operated from the touch screen module.
• The DVI video composition unit supports a wide variety of display formats (up to 1920x1200)
• Up to 11 external inputs are connected to the DVI video composition unit via wall connection box or boxes.

2. Medical grade, high resolution color LCD in the Examination Room
This display supports the image quality requirements for monochrome X-ray images as well as color images and replaces all displays normally delivered with the system for the Examination Room.
Main characteristics are:
- 58-inch, 8 Megapixel color LCD
- Native resolution: 3840x2160
- Brightness: Max: 700 Cd/m2 (typical) stabilized: 400 Cd/m2
- Contrast ratio: 1:4000 (typical)
- Wide viewing angle (approx. 176 degrees)
- Constant brightness stabilization control
- Lookup tables for gray-scale, color and DICOM transfer function
- Full protective screen Ingress Protection: IP-21

3. Large color LCD control (touch screen module)
• Enlarge information at any stage during the case via the touch screen module in the Examination Room or Control Room.
• Select viewing lay-outs via the touch screen module in the Examination Room.
• Create new layouts by matching inputs to desired locations on preset templates.

• Adjust the screen layout during the procedure without going into configuration
• 20 layouts; each layout is customizable, size of viewports can be customized by end user X-ray status area visible with all X-ray details

4. Monitor ceiling suspension
Monitor ceiling suspension for use in the Examination Room carries the 58-inch color LCD, providing highly flexible viewing capabilities. The monitor ceiling suspension is height-adjustable and moveable along ceiling rails. It can be positioned on either side of the table.

5. Snapshot
The snapshot function allows the user to store/save a screen-capture of any image on the FlexVision HD as a photo image to the current acquisition patient study.

| 21 | **NCVC796 | XperCT Dual. | 1 | $61,587.00 | $61,587.00 |

XperCT Dual
XperCT Dual allows two scans to be made on the X-ray system at a defined interval, resulting in CT-like images.

Key benefits
• Aids in assessment of soft tissue, bone structure, and stent deployment
• Fast reconstructions support fast decisions during procedures
• DualPhase acquisitions allow visualization of arterial and post-arterial contrast enhanced images to support oncology interventions

Supports assessment of soft tissue, bone structure, and stent deployment
One of the challenges during interventional procedures is to treat the region of interest without affecting healthy tissue or organs. XperCT Dual is a version of XperCT, which allows two scans to be made on the X-ray system at a defined interval, providing high resolution, high contrast images within seconds. Physicians can use the CT-like images of XperCT Dual to assess soft tissue, bone structure, and stent deployment before, during, and after interventions. This aids in avoiding structures and identifying feeder vessels.

Specifications
XperCT Dual protocols are available covering routine procedures such as biopsies and drainages but also advanced procedures such as abdominal oncological imaging up to neuro high resolution stenting. All protocols can be selected at the tableside via the touch screen module.

The DualPhase dual view functionality allows the simultaneous visualization of two 3D datasets acquired at different times of the procedure such as the arterial and post-arterial contrast enhancement in oncologic liver imaging. In this DualView, XperCT Dual allows the segmentation of multiple lesions at the same time in the viewed datasets.

XperCT Dual acquires up to 60 frames/sec. (frame rate extension to 60frames/sec is included) and supports fast abdominal protocols with 5 to 8 second acquisition times for the X-ray system, thereby minimizing respiratory artifacts. The XperCT volume is displayed automatically within 8 to 15 seconds after acquisition. No user interaction is required.

XperCT Dual includes Metal Artifact Reduction to reduce the artifacts caused by metal presence in the region of interest. BMI Noise Reduction is included to reduce the noise caused by large size patients (only available when Abdominal XperCT runs are selected).

The XperCT volume can be viewed in the control room and in the examination room. The viewing package comprises:
• 3D volume viewing in any desired orientation
• Slice viewing in any desired orientation
• Slice viewing at any slice thickness with a minimum of 0.5 mm

• Five distance measurements calculated in the same volume, including "Quick measurement" feature
• Cut-plane functionality to provide precise insight into anatomical structure
• Unique high-resolution reconstructive zoom technique
• Graphical display of stand position including rotation and angulation parameters
• Contrast and brightness control
• Contrast resolution 5-10 Hu
• Spatial resolution of the initial reconstruction: 10 lp/mm
• Contrast range -1000 to 2000 Hu
• High resolution imaging mode produces
• 512x512x512 volume rendered reconstructions
• XperCT Dual can be controlled via the touch screen module and the mouse at tableside.

The XperCT volume can be matched with (when additional options are available) 3D-RA (3D Rotational Angiography) and pre acquired CT, PET/CT or MR volumes. This view allows combining multiple images from different modalities in order to provide additional anatomical insight. This multimodality volume can be viewed with the following functionalities:
• Registration of the two volumes from the same patient
• The resulting volume can be viewed with complete 3D-RA viewing functionality
• The XperCT slice can be overlaid onto the 3D vessel for better assessment of the region of interest
• Three different contrast rendering options to allow viewing of the 3D vessel in the soft tissue structure
• (128x128x128, 256x256x256, 384x384x384 and 512x512x512 volumes)
• Movie clip recording functionality (AVI) to capture dynamic views
• 3D automatic position control at tableside: When an working position is selected from the XperCT volume the C-arc steers itself to the selected position
• 3D Follow C-arc at tableside
• XperCT data and 3D-RA with XperCT Dual overlay is stored in the same patient file as all other patient related data. All this data can be reviewed at any time.

XperCT data can be exported to:
• Any optional DICOM compatible device (e.g. PACS/Printer), supported are DICOM XA, DICOM SC, DICOM CT and DICOM 3D
• Support archive on one or multiple DVD's, CD-ROM(s)
• Image transfer to a standard PC compatible format (JPEG, AVI)
• Store a subset of exportable objects (snapshots and AVI Movies) to a USB device.

XperCT Open and Closed
For Philips Azurion Interventional X-ray suites, Open trajectory function is available in propeller mode in addition to the current standard trajectory.

Specifications
Open Trajectory provides 3D rotational acquisitions with start and stop positions of +55° to -185° respectively. This protocol opens the arc to the left side of the patient allowing for a wider translation of the angiographic table towards this direction; thereby shifting the isocenter of the C-arm to the right lateral side of the patient. This enables visualizing off-centered regions of interest (such as the periphery of the liver) in a single sweep. In this function, the data is acquired at the same frame rate as XperCT Dual (60 frames/sec). With 'XperCT Open and Closed' functionality, customers can continue to retain the current standard closed trajectory protocols. Therefore, customers will be able to choose either of the trajectories in propeller mode during the procedure as per their preference.

22	**NCVD081	Touch Screen Module Pro	1	$26,095.50	$26,095.50

Line #	Part #	Description	Qty	Each	Price

Extension of Touch Screen Module for easy control of X-Ray images at table site

Key benefits
- Imaging parameters can be quickly and easily adjusted at tableside
- Clinical image are shown to support easy navigation. Collimate on the clinical image with one finger. Pinch, zoom, pan and flag images for processing. Position shutters and wedges by simply swiping the image on screen.
- All X-ray settings can be easily adjusted to help you effectively manage patient and staff dose

Enhance image navigation on the touch screen module
This option extends the functionality of the touch screen module, allowing live X-ray images and source images from reference monitors to be displayed on the touch screen module. Shutters and wedges can also be easily positioned with a fingertip by simply dragging them into position. A pointer is also available on screen to improve communication in and between the exam room and control room.

Specifications
- enhance image navigation on the TSM
- intuitive control of shutters and wedges by simply dragging the lines shown on top of the image
- provides intuitive zooming an panning functionality (also during fluoroscopy)
- turns the touchscreen into the pointing device in order to improve communication in ER/CR: when activated the pointer is shown on corresponding monitor
!!! Note: Touchpad and Keyboard control from the TSM is NOT part of this option but 'FlexVision Pro' option.
!!! Note: Images shown on the TSM are not meant for diagnostic purposes (image is downscaled, compressed and latency during live/replay maybe higher than on the live monitor)

| 23 | **NCVD133 | **FD Dual Fluoro biplane** | 1 | $39,352.50 | $39,352.50 |

An additional fluoro display in parallel to the standard fluoro channel

Key benefits
• View subtracted fluoroscopy next to default non subtracted fluoroscopy
• View a digitally zoomed fluoroscopy image next to the default fluoroscopy image

Second fluoro image to support complex interventions
For complex interventions, it can be useful to view the subtracted fluoroscopy image next to the normal fluoroscopy image. The Dual Fluoro option provides an additional fluoro channel in parallel to the default fluoro channel. The dual fluoro option allows to view live digitally zoomed fluoroscopy next to non-zoomed fluoroscopy.

Specifications
The Dual fluoroscopy mode is selected via the touch screen module. The trace subtracted fluoro image will be displayed on the live viewport, the non-subtracted fluoro image is displayed on the reference 3 viewport. In Dual Fluoro mode, the live fluoroscopy image can be zoomed digitally, providing a larger view of the region of interest for complex interventions. The zoomed live fluoroscopy image will be shown on the live viewport, while the entire non zoomed image will be shown on the reference 3 viewport. The fluoro zoom function is controlled via the touch screen module.

| 24 | **NCVD178 | **IW Hardware** | 1 | $21,321.00 | $21,321.00 |

Key benefits
• Facilitates the interventional tools and multimodality viewing in exam room and control room
• Supports import and viewing of DICOM compatible data from CT and MR imaging modalities

View multimodality images in exam room and control room
Images from a variety of sources are being increasingly used during interventions for a variety of Live Image Guidance tools. The Interventional Tools Hardware option provides the hardware for

Line #	Part #	Description	Qty	Each	Price

our interventional tools. It enables DICOM compatible data from other imaging modalities to be imported and viewed in the exam room and control room. To support fast results, a real-time digital image link is provided between the Interventional Hardware workstation and the X-ray system.

Specifications

The Interventional hardware is the hardware for the 3D interventional tools that includes Real Time Link. It enables import and viewing of DICOM compatible data from other imaging modalities.
The Interventional Hardware comprises at least:
• Computer Workstation
• Control Room 24" display
• 16 GB memory
• 1.5 TB disk for the operating system, application software and application data
• Internal CD-ROM / DVD writer
• Mouse tablet to interact with all the interventional tools at the table side.
Conditionally:
FD Calibration Tool Kit for 3D-RA

| 25 | **FCV0510 | Long mattress cardio | 1 | $558.00 | $558.00 |

• Enhances patient comfort
• Adapts to the shape of the patient's body

Enhance patient comfort during cardio exams

To enhance patient comfort during cardio exams, the inflatable, latex free mattress can be used. It is extra-long to accommodate the patient on the tabletop, and adapts to the shape of the patient's body. The pressure within the mattress is evenly distributed so that it recovers its original shape quickly.

Dimensions of the mattress:
Length: 3165mm
Width: 500mm
Height: 70mm
Radius: 150mm

| 26 | **FCV0625 | Table mounted rad. Shield | 1 | $2,169.00 | $2,169.00 |

A table-mounted radiation shield for additional protection of physician and staff against scatter radiation

Key benefits
• Transparent ceiling mounted shield can be easily positioned where needed
• Can be used in combination with lower body radiation shield

Protect the upper body from scatter radiation

Radiation shields can provide substantial protection from scatter radiation during interventions. The table mounted radiation shield is designed to offer additional protection for the physician and staff against scatter radiation during procedures. The shield consists of two protective parts: a lower shield and an upper shield. The shield is specially designed for use with the AD5 and patient table.

The shields can be mounted to either the right or left table accessory rails. Each radiation shield can be easily pivoted into the required working position and parked underneath the tabletop to facilitate patient preparation. The upper shield can be positioned upright to provide protection, or can be folded down for free access to the patient.

Specifications
• Lower shield measuring 70 cm high x 80 cm wide curved shape, 0.5 mm Pb equivalence
• Upper shield measuring 40 cm high x 50 cm wide 0.5 mm Pb equivalence
• Mounting clamp
• Docking device for wall mounting.

Line #	Part #	Description	Qty	Each	Price
27	**FCV0815	add. table access. rail (US)	1	$3,712.50	$3,712.50

• Position operating modules and/or accessories conveniently
• Work comfortably at the head end of the table

Work comfortably at the head end of the table

To provide more flexibility when working at the head end of the table, the auxiliary OP (operation profile) rail can be used to position operating modules and/or accessories closer to the head end of the tabletop. This allows the user to work comfortably when performing pacemaker implantations, venous jugular catheter insertions, and other procedures near the patient's head. This version of the OP rail is designed for use in the US only.

Line #	Part #	Description	Qty	Each	Price
28	**FCV0817	Accessory rail + cable ext.kit	1	$3,528.00	$3,528.00

• Extend the length of the OP rail to fit cardio and neuro tabletops
• Position operating modules and/or accessories conveniently
• Work comfortably at the head end of the table

Extend the length of the OP rail

To provide more flexibility when performing procedures, the additional OP rail accessory with cable extension kit is equipped with everything needed to mount operating modules and/or accessories next to the tabletop.

Specifications
This option includes the following items:
• One additional OP rail (mechanical) of 500 mm
• Cable extension set for OP rail
• Extension cable for control module, 1.3 meters long
• One connection box to connect the user interface cables to the module cables
• An extension for the table op rail of 500 mm

The additional OP rail can be mounted on either side of the tabletop where no OP rails are mounted. The additional OP rail is compatible with AD5 and AD7 Table (cardio and neuro) patient tabletops. The OP rail has the same profile and dimensions as the current standard OP rail. The maximum load (downwards) on the additional OP rail is 100 N (F=100N), the maximum mechanical moment on the additional OP-Rail is 40Nm downwards and 20Nm upwards, determined by the tabletop of the patient table.

Line #	Part #	Description	Qty	Each	Price
29	**989801220158	Mark 7 Arterion, Table Mount	1	$25,650.00	$25,650.00

The Mark 7 Arterion Injection System is the latest in MEDRAD's "Mark" series of angiographic injectors. Compared to earlier systems, the Mark 7 Arterion injector head is lighter and easier to use so you can focus more on the patient.
The clear and intuitive user interface guides you through proper set-up, and highlights the information you need to perform safe procedures.
Unique to the market, the front load system simplifies set-up and makes for a cleaner tear down.
The clear syringe provides a higher level of confidence that you are ready to inject.

Made from a clear material, the Mark 7 Arterion syringe (Catalog ART 700 SYR) allows you to easily view the inside of the syringe for smoother purging of air. And MEDRAD's famous fluid dots are still there to help-round for fluid, oval for air.
The table mount injector solution ensures the contrast injector is conveniently placed and always available when it is needed. It provides a clean workspace without occupying valuable floor space. System includes:

• Table Mount
• display control panel

- 6 ft. coiled hand switch
- operation manual (CD)
- 10 ft. head cable
- syringe heat maintainer
- imaging system interface cable for the Allura / Allura Xper
- consumables starters kit

For the MEDRAD Mark7 Injector system Philips is only the distributor. MEDRAD provides the service as well as the application support of both versions unless stated differently in the Philips Service Agreement

System Specifications:

- Flow Rate 0.1-45.0 ml/s in 0.1 ml increments
- 0.1-59.9 ml/m in 0.1 ml increments
- Volume 1-150 ml in 1 ml increments
- Pressure Limit 100-1200 psi in 1 psi increments
- (150ml syringe) 689-8273 kPa in 1 kPa increments
- Rise Time 0.0-9.9 seconds in 0.1 increments
- Delay Time 0.0-99.9 seconds in 0.1 increments
- Fill Speed 1-20 ml/s
- Fill Volume 1-150 ml
- Syringe Size 150 ml
- Syringe Heat Maintainer 35 °C (95 °F) ± 5 °C (9 °F)
- Protocol Memory 40 Protocols
- Injection Memory History

Line #	Part #	Description	Qty	Each	Price
30	**989801220375	Black Anti-fatigue Floor Mat w/logo.	2	$180.00	$360.00

Black Anti-fatigue Floor Mat with Philips Logo

36" x 60"

Line #	Part #	Description	Qty	Each	Price
31	**989801256034	iXR Full Travel Package OffSite	2	$2,330.00	$4,660.00

Includes one (1) participant's airfare from North American customer location to Cleveland, Ohio, with lodging, ground transportation, and meal expenses. Breakfast/dinner provided by the hotel, and lunch/breaks are catered by Philips. All other expenses will be the responsibility of the attendee. Details are provided during the scheduling process.
Note: Cancellation/rescheduling policy strictly enforced.
Education expires one (1) year from equipment installation date (or purchase date if sold separately).

Line #	Part #	Description	Qty	Each	Price
32	**989801220514	· Compact Low Load Fluoro UPS – Standard	1	$40,117.50	$40,117.50

• Custom designed Schneider UPS for Philips
• Compatible with Allura 8.2 and Azurion IGT imaging systems
• 20kVA (80kVA Peak) Capacity UPS with integrated input 20kVA 480v/400v isolation transformer
• Input Breaker Panel with integrated EPO switch
• Output Switch rated at 80 amp
• Remote Alarm Status Panel (RASP) – Touch screen for UPS monitoring with Dry contact cards for UPS
• Network Management Cards with external Triple Chassis for Optional Network Management

Line #	Part #	Description	Qty	Each	Price

• Factory Start-Up Service (5x8, Normal business Hours) and 2nd year of warranty service (next business day response)

Compatible with Allura R8.2 and Azurion R1.1 and R1.2 IGT imaging systems

| 33 | SP059Q | **Clinical Services Flex Account** | 1 | $20,000.00 | $20,000.00 |

Flex Training $20,000 over 3 years (non-discountable)

SP059Q Clinical Services Flex Account Agreement

Customer may request non-discountable clinical training ("Training") commencing on the warranty start date for a period of three (3) years ("Training Contract Period") from the Philips course catalogs available at the time Training is requested.

As Customer requests Training, the Flex Account balance will be reduced by Philips pursuant to the then current published and non-discountable list price for a given Training, multiplied by the number of Trainees scheduled to attend.

Subject to the terms and conditions in this Agreement, Philips will provide requested Training during the Training Contract Period until the monetary level of training is exhausted or falls below the then current published and non-discounted list price of the requested Training. Training coverage expires at the end of the Training Contract Period and no credit for any unused funds may be carried forward to the next year.

Course catalogs include:

- Guided pathways to clinical excellence: Imaging Systems continuing education course catalog
- Education designed around you: Ultrasound course catalog
- Philips online Learning Center: www.philips.com/learningcenter
- Some additional clinical education programs may apply

Selections can be made across one or any of these modalities: Computed Tomography (CT), Cardiovascular (CV), General X-Ray (GXR), Hybrid, Magnetic Resonance (MR), Nuclear Medicine (NM), CT Simulation and Treatment Planning (Oncology), and Ultrasound.

Philips Training may be conducted at Philips training facilities, the Customer location(s) listed below in this Agreement ("Customer Site(s)"), through on-line or remote training, or at a third party location as determined by Philips. Customer is responsible for scheduling Training for its employees ("Trainee(s)"). Philips will make reasonable efforts to accommodate Customers scheduling requests. All Training is subject to availability. Philips reserves the right to cancel or reschedule courses at its sole discretion.

Trainee(s) must meet the minimum admission requirements set forth in the course syllabus, must satisfy all prerequisites prior to admission and may be required to sign or acknowledge Philips safety checklist prior to receiving Training. PHILIPS MAKES NO WARRANTY THAT ANY TRAINEE WILL PASS ALL OR ANY PORTION OF THE TRAINING COURSES PROVIDED OR THAT THE TRAINING WILL RESULT IN ANY TRAINEE BEING QUALIFIED OR ABLE TO OPERATE THE SYSTEM.

Unless otherwise indicated in this agreement, all travel and living expenses incurred by the Trainee(s) will be the responsibility of the Customer.

Line #	Part #	Description	Qty	Each	Price

To receive remote training Customer must provide Philips a secure location to store a Philips remote services ("PRS") router (or a Customer owned router acceptable to Philips) for connection to the products and Customer network; provide Philips appropriate access to the PRS router to enable Philips to access the products remotely; provide Philips with a dedicated broadband Internet access node including, but not limited to, public and private interface access suitable to establish a successful connection to the products through the Philips PRS and Customers network for Philips use in remote training, transmitting automated status notification from the products and regular uploading of products data files (such as, but not limited to, error logs and utilization data for improvement of Philips products and services and aggregation into new services). Unless Philips determines in its sole discretion that the products cannot be connected to the PRS, then Customer's failure to provide the access described in this paragraph will constitute Customer's waiver of its rights to remote training under this Agreement. Customer must identify, in writing, one (1) Customer representative to Philips who will manage and be responsible for Customer's selection and scheduling of all Training to be provided by Philips.

| 34 | SP059M | **LIFE Commercial Upgrades** | 1 | $489.00 | $489.00 |

Protection Glass for Large Monitor

| 35 | SP059R | **Service Items** | 1 | $10,000.00 | $10,000.00 |

Service Rigging

| 36 | SP059U | **Maximizer Basic Package** | 1 | $35,000.00 | $35,000.00 |

Tech Maximizer WIN 10

Package includes Philips Technology Maximizer and a Clinical Education Flex Account

Philips Technology Maximizer: Philips Technology Maximizer entitles Customer to software upgrades during the agreement term (annual units selected) beginning at the completion of the standard warranty period. Software upgrades may be provided and will not be excluded during the initial warranty period. Includes core operating system software upgrades only, if and when available. Hardware updates are not included.

Clinical Education Flex Account: The clinical education flex account entitles Customer to $1,500 of clinical education and product training ("Training") that Customer has selected from Philips' course catalog(s) ("Course Catalog(s)") during each year of coverage.

The Technology Maximizer Package is not cancellable and will remain in effect for the Maximizer agreement term.

********PROMOTIONS********

Promotion Name	Description
IGTS OS Protection via Maximizer Basic	If required, customers who take delivery of new Azurion systems before Windows 10 is shipping natively on Azurion systems, will receive a $35k savings on their selected Maximizer program to cover this upgrade. This promotion, discounts the attached quote $35,000 to offset the line item listed as SP059U. If the delivery timetable shifts and Windows 10 is shipping from the factory on the Azurion platform, both this promotion and the SP059U line item will be removed from the quote as the commitment promised by these two lines will be delivered automatically.
IGTS Boost Biplane Promo Q2 2020	For a limited time, customers purchasing eligible new or remanufactured Azurion or Allura biplane systems may receive a special $150K discount. Orders must be received by June 30, 2020.

NET PRICE $1,978,495.00

Buying Group: VIZIENT SUPPLY LLC

                                           Contract #:   Multi Modality GB Q2 20

Addt'l Terms:

Each Quotation solution will reference a specific Buying Group/Contract Number representing an agreement containing discounts, fees and any specific terms and conditions which will apply to that single quoted solution. If no Buying Group/Contract Number is shown, Philips' Terms and Conditions of Sale will apply to the quoted solution.

Each equipment system listed on purchase order/orders represents a separate and distinct financial transaction. We understand and agree that each transaction is to be individually billed and paid.

Price above does not include any applicable sales taxes.

The preliminary delivery request date for this equipment is:_____.

If you do not issue formal purchase orders indicate by initialing here_____.

Tax Status:

Taxable_____   Tax Exempt_____

If Exempt, please indicate the Exemption Certification Number:_____, and attach a copy of the certificate.

Delivery/Installation Address: Invoice Address:

_____   _____

_____   _____

_____   _____

Contact Phone #:   Contact Phone #:

_____   _____

Purchaser approval as quoted: Date:

_____   _____

Title:

_____

This quotation is signed and accepted by an authorized representative in acknowledgement of the system configuration, terms and conditions stated herein.

SCHEDULE 11
PHILIPS MAXIMIZER PACKAGE TERMS AND CONDITIONS

1. Philips Maximizer.

If Maximizer is purchased under this Agreement, then Philips will upgrade the Covered System's software as follows:

1.1. Philips will provide the latest available system software upgrades, if any, when available and approved by Philips, not to exceed one (1) per calendar year, scheduled and delivered within twelve (12) months of the annual eligible upgrade release date, to the Covered System operating system software, basic application software, and software options purchased with the Covered System, but does not include software options that are separately purchasable on the Covered System.

1.2. Upgrades do not include functionality, applications, options or the like that were not purchased with the System, including but not limited to virus protection software. Upgrades include software options that are contained within subsequent core operating system software releases. Customer may not resell, transfer, or assign the right to such Upgrades to any third party. In addition to these terms and conditions, all Upgrades to a Covered System's software provided under this Section 13 are subject to the licensing terms and conditions included in the purchase of the Covered System from Philips.

2. CLINICAL EDUCATION TRAINING.

2.1 TRAINING COVERAGE.

Philips will provide the clinical education and product applications training ("Training") that customer has selected from the Philips' course catalog(s) ("Course Catalog(s)").

2.2 EXCLUSIONS.

Training does not include (a) maintenance or diagnostic related technical training or (b) clinical applications training on hardware or software not installed or provided by Philips.

2.3 SCHEDULING.

Training must be scheduled at least eight (8) weeks in advance except for on-line training. Changes to scheduled Training must be received in writing by Philips at least two (2) weeks prior to scheduled delivery.

2.4 ATTENDANCE.

Philips will train the number of Customer employees ("Trainee(s)") for the course specified in the quotation, when space is available. Trainee(s) must meet the minimum admission requirements set forth in the course syllabus, must satisfy all prerequisites prior to admission, and may be required to sign or acknowledge Philips safety checklist prior to receiving Training.

2.5 COURSE LOCATION.

Training may be conducted at Philips' training facilities, the Customer location(s) described in this Agreement ("Customer Site(s)"), through on-line or remote training, or at a third party location determined by Philips

2.6 PAYMENT OPTIONS.

2.6.1 Flexible Spending Accounts.

If Customer purchased Flexible Spending Account option, the initial account balance is specified in the quotation. The account balance is reduced by the list price for the specified course per attendee. When the balance is depleted, customer may add funds to their account. If the account balance is negative, then customer shall promptly pay Philips the balance due. Account balances will not carry over from year to year. Any remaining account balance at the end of the year will not be refunded.

2.6.2 Direct Course Purchase.

Customer may purchase individual courses at then current prices.

2.7 TRAVEL.

Philips' travel expenses for all Training delivered at the Customer Site are included in the price described in the applicable Course Catalog(s). Unless otherwise indicated in the Course Catalog(s), all travel and living expenses incurred by the Trainee(s) are the Customer's responsibility.

2.8 WARRANTY DISCLAIMER.

PHILIPS MAKES NO WARRANTY THAT ANY TRAINEE WILL PASS ALL OR ANY PORTION OF THE TRAINING COURSES PROVIDED OR THAT THE TRAINING WILL RESULT IN ANY TRAINEE BEING QUALIFIED OR ABLE TO OPERATE THE SYSTEM.

PHILIPS PRODUCT WARRANTY

Interventional X-RAY (IXR) Systems
Product Warranty

This product warranty document is an addition to the terms and conditions set forth in the quotation to which this warranty document is attached. Unless specifically listed below, this warranty does not apply to replacement parts. The terms and conditions of the quotation are incorporated into this warranty document. The capitalized terms herein have the same meaning as set forth in the quotation.

1. Twelve (12) Month System Warranty

1.1 Philips Healthcare a division of Philips North America LLC (Philips) warrants to Customer that the Philips' Interventional X-Ray Systems (System) will perform in substantial compliance with its performance specifications, in the documentation accompanying the System, for a period of twelve (12) months after completion of installation or availability for first patient use, whichever occurs first.

1.2 Any glassware or flat detectors provided with the System is subject to special warranty terms set forth below.

2. Planned Maintenance

2.1 During the warranty period, Philips' service personnel will schedule planned maintenance visits, in advance, at a mutually agreeable time on weekdays, between 8:00 am and 5:00 pm local time, excluding Philips' observed holidays.

3. System Options, Upgrades or Accessories.

3.1 Any Philips' authorized options, upgrades, or accessories for the System which are delivered and/or installed on the System during the original term of the System warranty shall be subject to the same warranty terms contained in the first paragraph of this warranty, except that such warranty shall expire on the later of:

3.1.1 upon termination of the initial twelve (12) month warranty period for the System on which the option or accessory is installed,

3.1.2 after ninety (90) days for parts only from the date of installation.

4. MRC X-Ray Tubes

4.1 Philips warrants to Customer, for the warranty periods further specified in this section, that the Philips' X-Ray tubes (tubes) will be substantially free from defects in material and manufacturing workmanship, which impair performance under normal use as specified in Philips' System descriptions and specifications.

4.2 The warranty period for MRC Tubes provided with Customer's purchase of a new or refurbished X-Ray system shall be the shorter of thirty-six (36) months after installation or thirty-eight (38) months after date of shipment from Philips.

4.3 The warranty period for purchases of replacement tubes shall be the shorter of twelve (12) months after installation or fourteen (14) months after date of shipment from Philips.

5. MRC Tube Warranty Exclusions

5.1 The above warranty shall not apply to X-Ray Tubes outside the United States and Canada.

5.2 Philips' obligations under the System warranty do not apply to any System defects resulting from: improper or inadequate maintenance or calibration by Customer or its agents; Customer or third party supplied software, interfaces, or supplies; use or operation of the System other than in accordance with Philips' applicable System specifications and written instructions; improper site preparation; abuse, negligence, accident, loss or damage in transit, unauthorized maintenance or modifications to the System; or, to viruses or similar software interference resulting from the connection of the System to a network.

6. MRC Tube Warranty Remedies

6.1 If a tube is found to fail during the warranty period, and if, in the best judgment of Philips, the failure is not due to neglect, accident, improper installation, use contrary to instructions, or the exclusions stated above, Philips' tube warranty liability hereunder is limited to, at Philips' option, the repair or replacement of the tube.

6.2 Any replacement tube would have a warranty period equal to the balance of the warranty period left on the tube replaced.

7. Dynamic Flat Detectors

7.1 Philips warrants the Dynamix Flat Detectors (detector) provided with the System, if any, will be free from defects in material and manufacturing workmanship for twelve (12) months.

7.2 Claims must be made within twelve (12) months after installation or fifteen (15) months after date of shipment from Philips, whichever occurs first.

7.3 If a detector fails to meet this warranty, as Customer's sole and exclusive remedy, upon return of the detector, Philips will provide Customer a replacement detector at no additional charge.

8. System Software and Software Updates

8.1 The software provided with the System will be the latest version of the standard software available for that System as of the ninetieth (90th) day prior to the date the System is delivered to Customer.

8.2 Updates to standard software for the System that do not require additional hardware or equipment modifications will be performed as a part of normal warranty service during the term of the warranty.

8.3 All software is and shall remain the sole property of Philips or its software suppliers.

8.4 Use of the software is subject to the terms of a separate software license agreement. Customer must sign all such license agreements prior to or upon the delivery of the product.

8.5 No license or other right is granted to Customer or to any other party to use the software except as set forth in the license agreements.

8.6 Any Philips maintenance or service software and documentation provided with the System and/or located at Customer's premises is intended solely to assist Philips and its authorized agents to install and to test the System, to assist Philips and its authorized agents to maintain and to service the System under a separate support agreement with Customer, or to permit Customer to maintain and service the System.

8.7 Customer agrees to restrict the access to such software and documentation to Philips employees, those of its authorized agents, and to authorized employees of Customer only.

9. Warranty Limitations

9.1 Philips' sole obligations and Customer's exclusive remedy under any product warranty are limited, at Philips option, to the repair or the replacement of the product or a portion thereof, within thirty (30) days after receipt of written notice of such material breach from Customer (Product Warranty Cure Period) or, upon expiration of the Product Warranty Cure Period, to a refund of a portion of the purchase price paid by the Customer upon Customer's request.

9.2 Any refund will be paid, to the Customer when the product is returned to Philips.

9.3 Warranty service outside of normal working hours (i.e 8:00 am to 5:00 pm Monday through Friday, excluding Philips' observed holidays), will be subject to payment by Customer at Philips standard service rates.

9.4 This warranty is subject to the following conditions: the product

9.4.1 is to be installed by authorized Philips' representitives (or is to be installed in accordance with all Philips' installation instructions by personnel trained by Philips);

9.4.2 is to be operated exclusively by duly qualified personnel in a safe and reasonable manner in accordance with Philips' written instructions and for the purpose for which the products were intended; and

9.4.3 is to be maintained and in strict compliance with all reccommended and scheduled maintenance instructions provided with the Product.

9.5 Philips' obligations under any product warranty do not apply to any product defects resulting from: improper or inadequate maintenance or calibration by the Customer or its agents; Customer or third party supplied interfaces, supplies, or software including without limitation loading of operating system patches to the Licensed Software and/or upgrades to anti-virus software running in connection with the Licensed Software without prior approval by Philips; use or operation of the product other than in accordance Philips' applicable product specifications and written instructions; abuse, negligence, accident, loss, or damage in transit; improper site perparation; unauthorized maintenance or modifications to the product; or, viruses or similar software interference resulting from connection of the product to a network.

9.6 Philips does not provide a warranty for any third party products furnished to Customer by Philips under this quotation; however, Philips shall use reasonable efforts to extend to Customer the third party warranty for the product.

9.7 The obligations of Philips described herein are Philips' only obligations and Customer's sole and exclusive remedy for a breach of a warranty.

9.8 THE WARRANTIES SET FORTH HEREIN AND IN PHILIPS WARRANTY DOCUMENT WITH RESPECT TO A PRODUCT (INCLUDING THE SOFTWARE PROVIDED WITH THE PRODUCT) ARE THE ONLY WARRANTIES MADE BY PHILIPS IN CONNECTION WITH THE PRODUCT, THE SOFTWARE, AND THE TRANSACTIONS CONTEMPLATED BY THE QUOTATION, AND ARE EXPRESSLY IN LIEU OF ANY OTHER WARRANTIES, WHETHER WRITTEN, ORAL, STATUTORY, EXPRESS OR IMPLIED INCLUDING, WITHOUT LIMITATION, ANY WARRANTY OF NON-INFRINGEMENT MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

9.9 Philips may use refurbished parts in the manufacture of the products, which are subject to the same quality control procedures and warranties as for new parts.

10. Philips' Remote Services Network (RSN)

10.1 Customer will

10.1.1 provide Philips with a secure location at Customer's premises to store one Philips Remote Services Network router and provide full and free access to this router, (or a Customer-owned router acceptable to Philips) for connection to the equipment and to Customer's network; or

10.1.2 provide Philips with outbound internet access over SSL; at all times during the warranty period provide full and free access to the equipment and the Customer network for Philips' use in remote servicing of the product, remote assistance to personnel that operate the products, updating the products software, transmitting automated status notifications

from the product and regular uploading of products data files (such as but not limited to error logs and utilization data for improvement of Philips' products and services and aggregation into services).

10.2 Customer's failure to provide such access will constitute Customer's waiver of the scheduled planned maintenance service and will void support or warranty coverage of product malfunctions until such time as planned maintenance service is completed or RSN access is provided.

10.3 Customer agrees to pay Philips at the prevailing demand service rates for all time spent by Philips' service personnel waiting for extended coverage.

11. Transfer of System

11.1 In the event Customer transfers or relocates the System, all obligations under this warranty will terminate unless Customer receives the prior written consent of Philips for the transfer or relocation.

11.2 Upon any transfer or relocation, the System must be inspected and certified by Philips as being free from all defects in material, software and workmanship and as being in compliance with all technical and performance specifications.

11.3 Customer will compensate Philips for these services at the prevailing service rates in effect as of the date the inspection is performed.

11.4 Any System which is transported intact to pre-approved locations and is maintained as originally installed in mobile configurations will remain covered by this warranty.

12. Limitation of Liability

12.1 THE TOTAL LIABILITY, IF ANY, OF PHILIPS AND ITS AFFILIATES FOR ALL DAMAGES AND BASED ON ALL CLAIMS, WHETHER ARISING OR RELATING TO BREACH OF CONTRACT, BREACH OF WARRANTY, NEGLIGENCE, INDEMNITY, STRICT LIABILITY OR OTHER TORT, OR OTHERWISE, ARISING FROM A PRODUCT, LICENSED SOFTWARE, AND/OR SERVICE IS LIMITED TO THE PRICE PAID HEREUNDER FOR THE PRODUCT, LICENSED SOFTWARE, OR SERVICE GIVING RISE TO THE LIABILITY.

12.2 THIS LIMITATION SHALL NOT APPLY TO:

12.2.1 THIRD PARTY CLAIMS FOR DIRECT DAMAGES FOR BODILY INJURY OR DEATH TO THE EXTENT CAUSED BY PHILIPS' NEGLIGENCE OR PROVEN PRODUCT DEFECT.

12.2.2 CLAIMS OF TANGIBLE PROPERTY DAMAGE REPRESENTING THE ACTUAL COST TO REPAIR OR REPLACE PHYSICAL PROPERTY TO THE EXTENT CAUSED BY PHILIPS' NEGLIGENCE OR PROVEN PRODUCT DEFECT;

12.2.3 OUT OF POCKET COSTS INCURRED BY CUSTOMER TO PROVIDE PATIENT NOTIFICATIONS, REQUIRED BY LAW, TO THE EXTENT SUCH NOTICES ARE CAUSED BY PHILIPS' UNAUTHORIZED DISCLOSURE OF PHI; and;

12.2.4 FINES/PENALTIES LEVIED AGAINST CUSTOMER BY GOVERNMENT AGENCIES CITING PHILIPS' UNAUTHORIZED DISCLOSURE OF PHI AS THE BASIS OF THE FINE/PENALTY, ANY SUCH FINES OR PENALTIES SHALL CONSTITUTE DIRECT DAMAGES.

13. Disclaimer

13.1 IN NO EVENT SHALL PHILIPS OR ITS AFFILIATES BE LIABLE FOR ANY INDIRECT, PUNITIVE, INCIDENTAL, CONSEQUENTIAL, EXEMPLARY OR SPECIAL DAMAGES, INCLUDING WITHOUT LIMITATION, LOST REVENUES OR PROFITS, BUSINESS INTERRUPTION, LOSS OF DATA OR THE COST OF SUBSTITUTE PRODUCTS OR SERVICES WHETHER ARISING FROM BREACH CONTRACT, BREACH OF WARRANTY, NEGLIGENCE, INDEMNITY, STRICT LIABILITY OR OTHER TORT.

14. FORCE MAJEURE

14.1 Philips and Customer shall each be excused from performing its obligations (except for payment obligations) arising from any delay or default caused by events beyond its reasonable control including, but not limited to: acts of God, acts of third parties, acts of any civil or military authority, fire, floods, war, embargoes, labor disputes, acts of sabotage, riots, accidents, delays of carriers, subcontractors or suppliers, voluntary or mandatory compliance with any government act, regulation or mandatory direction, request, shortage of labor, materials or manufacturing facilities. For clarity, Customer requests shall not be considered 'government' under this section.

Philips' system specifications are subject to change without notice

Non Disclosure Agreement for Philips Confidential Pricing Information

The parties specified below agree to the following terms:

A. Philips

Name	Philips Healthcare, a division of Philips North America LLC
Address	22100 Bothell-Everett Highway, Bothell, WA 98021 United States of America

B. Company

Name	THE CHILDRENS HOSPITAL OF ALABAMA
Address	1600 7TH AVE S BIRMINGHAM, AL 35233

C. Confidential Information

Authorized Purpose	To evaluate Philips' confidential information relating to pricing for imaging equipment ("Pricing") in connection with the potential purchase of such imaging equipment.
Period	Begins on the date Pricing is first disclosed and continues for 5 years from date Pricing is last disclosed.

D.

Philips Contact		Company Contact	
Name	Justin Helms	Name	
Title		Title	
Telephone	(256) 590-3943	Telephone	
Fax		Fax	
e-mail		e-mail	
Signature		Signature	

1. The following terms and conditions (the "Agreement") apply to Pricing disclosed by Philips and its Affiliates ("Philips") to Company and its Affiliates ("Company"), in connection with the Authorized Purpose.

   (a) Subject to Philips' prior written consent, Company may disclose, or request that Philips disclose, Pricing to Company's Affiliates that need to know the Pricing for carrying out the Authorized Purpose, provided they are advised of and agree to be bound by this Agreement. Company is responsible for any breach of this Agreement by its Affiliates.

   (b) An Affiliate is any corporation, company, or other entity, that: (i) is under the Control of a party hereto; or (ii) has Control of a party hereto; or (iii) is under common Control with a party hereto. For this purpose "Control" means that more than fifty percent (50%) of the controlled entity's shares or ownership interest representing the right to make decisions for such are owned or controlled, directly or indirectly, by the controlling entity.

2. Philips may disclose Pricing to Company with respect to the Authorized Purpose in writing, orally, or otherwise. All information is assumed to be Pricing, and confidential, if the confidential or proprietary nature is reasonable under the circumstances.

3. All Pricing disclosed by Philips shall remain Philips' the property. Company does not, by implication, estoppel, or otherwise, acquire any intellectual property right, title, or ownership, nor a license to any such intellectual property right, with respect to any Pricing disclosed by Philips hereunder.
   ALL PRICING IS PROVIDED ON AN "AS IS" BASIS, WITHOUT ANY WARRANTY WHATSOEVER. PHILIPS SHALL HAVE NO LIABILITY WHATSOEVER RESULTING FROM THE USE OF THE INFORMATION PROVIDED.

4. Company shall:
   (a) not use the Pricing for any purpose other than the Authorized Purpose;
   (b) not disclose the Pricing to any third party;
   (c) protect the Pricing against disclosure in the same manner and with the same degree of care with which Company protects its own confidential information but not less than a reasonable degree of care; and
   (d) limit circulation of the Pricing to Company's employees as have a need to know in connection with the Authorized Purpose.
   These obligations shall survive the termination of this Agreement. Philips may terminate this Agreement at any time by means of a written notice to Company. Company shall return to Philips, or certify destruction of, all Pricing, immediately upon termination or expiration of this Agreement.

5. Information disclosed by Philips to Company pursuant to this Agreement shall not be confidential to the extent that the information:
   (a) is or becomes part of the public domain without violation of this Agreement or any other obligation of confidentiality;
   (b) is known by Company prior to disclosure by Philips;
   (c) is lawfully obtained by Company from a third party without any breach of confidentiality or violation of law; or
   (d) is developed by Company completely independently of any such disclosure by Philips.

6. If Company is required, pursuant to administrative or judicial action or subpoena, to disclose the Pricing, Company shall use its best efforts to maintain the confidentiality of the Pricing, e.g. by asserting in such action any applicable privileges. Immediately after gaining knowledge or receiving notice of such action or subpoena, Company shall notify Philips and give Philips the opportunity to seek any other legal remedies so as to maintain such Pricing in confidence, including a reasonable protective order.

7. Company may not transfer or assign any or all of its rights and/or obligations or delegate the performance of any or all of its obligations under this Agreement, directly or indirectly, through acquisition, merger or otherwise, without the prior written consent of Philips. Any transfer, assignment or delegation in contravention of the foregoing shall be void.

8. Company shall not disclose, export or release the Pricing in contravention of any applicable laws or regulations.

9. This Agreement shall be governed and construed in accordance with the laws of the State of New York, without giving effect to its conflict of laws provisions.

10. This Agreement contains the entire understanding of the parties and supersedes any previous understandings or agreements with respect to the subject matter hereof. This Agreement may be amended only in writing signed by authorized representatives of each party.

Pricing NDA ver1 – 8/9/07