

SUPPLY WAREHOUSE
V. A. Medical Center
BUILDING 17

PURCHASE ORDER: 659- B60008

Qty	Product
1	CX50 2D xMATRIX
1	Adult Echo / Live xPlane Clinical Package
1	Vascular Clinical Option
1	CX50 Integrated US Client - Allura Xper FD Connect
1	2D ICE
1	Additional AC Power Adapter
1	Additional Battery Pack
1	Cart with Multi-port Adapter
1	USA Power Cord
1	X7-2t Transducer
1	L15-7io Transducer
1	English Manual

Qty	Product
1	30Fr/sec Extension
1	AlluraClarity_FD20 Ceiling
1	FlexVision_XL 8 Input Package
1	Prep table for Table Mount inj
1	XL screen video-share slaving
1	Addl sets of documentation
1	FlexVision XL,XperHD,Snapshot
1	Set of 2 additional 21in. LCDs
1	Xper Flex Cardio on XperModule
1	2ND REF for FlexVision XL
4	Xper Live/Ref Slaving
1	Standard Line Rate Video Output
1	Automatic Position Control (APC)
1	Table APC
1	FD Rotational Angio
1	Xper Swing
1	Subtracted Bolus Chase
1	Storage extension
1	FD Dual Fluoro
1	FD SmartMask
1	FULL AUTOCAL
1	Ventricular Quant.Sw pkg(Xper)
1	Coronary Quant.Sw pkg(Xper)
1	Xcelera on Xper Module
1	Wireless footswitch: mono-plane version
1	CX50 Video and UI coupling
1	Cath Arm Support
1	Pulse Cath Arm Support
1	Peripheral X-ray Filter
1	Pivot for table base.
1	Xper Table Tilt
1	Cradle extension
1	Table top brake kit for the Xper Table

Qty	Product
1	Table base Auxiliary OP rail
1	Long mattress cardio
1	Add.op-rail with cable ext.kit
2	CABLE CARRIER CS
10	Personal Dose Meter (1 piece)
2	Personal Dose Meter rack
1	Base Station Package
2	Black Anti-Fatigue Floor Mat w/ Blue Logo
2	Rad Shield w/ Arm (Contoured) 61X76
1	MOBILE RADIATION SHIELD
1	PIVOTING TABLE-MOUNTED RADIATION SHIELD
1	Cable Spooler
1	M LED 3MC Light
1	Mark 7 Arterion, Table Mount
1	CORE™ Printer Option
2	Ceiling Track w/Column & Handle Ext
1	Volcano CORE IVUS - Cardiac Bundle
1	46" 1080p LED Wall Display
1	55" 1080p LED Wall Display
1	Personal Wireless Bidirectional Audio
1	Add'l Wireless Microphone Set for Personal Audio
3	DVI fiber transmitter / receiver link
1	ISM Flex 12 Solution
3	IXR Additional Training 16 Hours OnSite
2	CV Full Travel Pkg OffSite
5	Airfare to Cleveland for Biomed Training
32	Food Transpt Lodging for Cleveland Biomed Training
1	XD3908EPCOCKPITNAVFLEX4D
1	XD3970ALLURAFD7.6PART1CTC9
1	XD3974ALLURAXPERREL7.6PART2CTC9
1	XD3007XRaySystemsBasicPart2CTC5D
1	XD8982ALLURAXPERCLARITYREL8.2CTC5D
1	Equipment Rack DVI

Qty	Product
1	Equipment rack Predelivery set
1	Electrical Accessory kit OSC
1	Pre-Install Bracket
1	Pneumatic Regulator
1	Riser Oxygen DISS connection
2	Riser Vacuum DISS connection
1	Riser MedAir DISS connection
1	25 kVA Fluoro only UPS - UPC
1	AD5 TO XPER TABLE ADAPT. PLATE

Qty	Product
1	Xper Flex Cardio Nurse Station
1	Xper Flex Cardio Flex Cardio 2010
1	Xper Flex Cardio Control Room
1	Side Stream ETCO2
1	SpO2 Measurement Volcano
3	Total Number Xper Concurrent User Licenses
2	Xper IM Concurrent User License
1	Xper IM Workspace
1	GCX Rolling Stand
1	4:3 LCD HQ Display (19 inch)
1	UPS - Medical Grade
1	16:9 LCD Display (22 inch)
1	Xper Flex Cardio Table Mount
1	AS3 Customer prov. Data Center and/or Broker Server HW
1	RK4 Customer to provide rack enclosure
1	Installation Cable Kit Control Room
1	Xper IM IfU (English) Manual
2	OnSite Clinical Training, 2 days
1	OnSite Clinical Training, Additional day
1	Workflow Consulting Services
1	Xper IM Clinical Super User ILT Course
1	Xper IM Clinical Super User Pre-Requisite e-learn
1	Xper IM Data Analytics eLearning Program
60	Contracts - Onsite PS Hours
40	Contracts - Onsite Training PS hours
284	Contracts - Remote PS hours
1	Xper OffSite Technical Training (Biomed)
1	Total number of Facilities

Line #	Part #	Description	Qty
1		CX50 2D xMATRIX	1

Interface:

- 15.0 inch high resolution display with wide viewing angle
- Quick Keys and Active Mode
- Laptop style Alphanumeric QWERTY keyboard
- 8 TGCs and 2 LGCs
- Ergonomic carrying handle
- Includes AC adapter , power cord and system battery pack
- 2 USB flash drives on system
- 80 GB hard drive
- Internal DVD RW drive

Architecture:

All-digital compact broadband beamformer, Microfine 2D focusing with Dynamic Focal Tuning that includes Advanced X-Res signal processing, 170 dB full time input dynamic range 18,432 digitally-processed channels, Continuously variable steering in 2D, color and Doppler modes 2D Opt signal processing with 4X multi-line parallel processing and frequency compounding.

Intelligent Controls:

The CX50 has been designed to make portable exams easy and efficient. With a single button, iSCAN technology automatically samples data for a new level of 2D and Doppler optimization iSCAN one-touch Intelligent Optimization, iSCAN one-touch Intelligent Color Optimization, iSCAN Doppler one-touch optimization.

Transducers:

Supports Compact family of transducers featuring PureWave imaging technology in the S5-1, CX7-2t, C5-1, D5CWC. Also supports the high resolution S12-4, S8-3, C8-5 and L12-3 transducers. All transducers provide breakthrough frequency bandwidths and array configurations. These transducers also have ergonomically designed lightweight flexible cables and compact connectors.

Modes:

- 2D
- M-mode
- Anatomical M-mode
- Color M-mode
- Pulsed Wave Doppler
- Color Power Angio (CPA)
- Continuous Wave Doppler
- Invert and Color Invert

- Color compare mode
- Dual mode
- Duplex for simultaneous 2D and Doppler
- 2D Optimization Signal Processing
- Live Compare
- Tissue Harmonic Imaging (THI)
- Reconstructed zoom with pan (read zoom)
- Write zoom
- Pulse Inversion Harmonic imaging
- Adaptive Doppler
- Adaptive Color Doppler
- Color Tissue Doppler imaging
- Pulsed Wave Tissue Doppler imaging
- Active Native Data - manipulation of image data
- DICOM Networking
 - Ethernet @100Mb/second Includes DICOM wired and wireless "G" and "N".
 - Provides DICOM 3.0 network print and store and storage commitment
 - Performed Procedure Step (pps)
 - Modality Worklist
- DICOM Structured Reporting

Cineloop review

- On-board workstation-class data management with thumbnail previews and storage of images, loops, and reports. Retrospective and prospective clip capture to internal drive or removable media
Integrated DVD/CD burning capability for storage of images or export in DICOM, JPEG and .avi for PC compatibility. Philips DICOM viewer option to imbed in media transfer for easy viewing of study on most PCs.
- Maintenance and Serviceability
- Remote Access for Expedient Clinical and Technical Support
- Flexible Service Agreements
- Clinical Application and Educational Support

Cinical Education

1 Day PAS Onsite - Ultrasound system or upgrade onsite training provided by a PAS (Product Applications Specialist) for specific system applications or upgrades; not per modality. *Education is provided Monday - Friday during normal business hours.* Note: Philips Healthcare personnel are not responsible for actual patient contact or operation of equipment during education sessions except to demonstrate proper equipment operation. The training sessions should be attended by the appropriate healthcare professional as identified by the department director. *Repeat training for staff non-attendance will not be accepted.* Site must be patient-ready to meet training expectations. All onsite training day expires within 90 days from system or upgrade installation date. Exceptions are for 3D Stress onsite training (which expires 9 months from system or upgrade installation date) and Fusion & Needle Navigation onsite training (which expires 180 days from system or upgrade installation date).

All Tuitions must be registered prior to the expiration date. The course chosen must be taken within 90 days of expiration.

Includes Adult Echo and Live xPlane Clinical options

Tissue Specific Imaging software for adult cardiac ultrasound applications. Display optimization software with Tissue Specific presets for adult cardiac imaging and Doppler applications. Analysis software package includes cardiac imaging protocol measurements and configurable reports and finding codes. Active native data for post-process optimization and advanced XRES adaptive image processing for improved tissue conspicuity. iSCAN intelligent one-button optimization for adaptive gain compensation in 2D, Doppler, Tissue Doppler Imaging and LVO contrast functions. Includes Live compare mode, cardiac High-Q Automatic Doppler Analysis and respiration waveform from chest impedance. Allows operation of S5-1, Compact X7-2t and D2cwc transducers.

Simultaneously acquires and displays two full-resolution planes, in real time. Allows independent control of tilt and rotation of second plane relative to first plane. Option requires use of Compact X7-2t TEE xMATRIX array transducer.

CX50 : This clinical option includes Tissue Specific Imaging software and SonoCT for Cerebrovascular, Peripheral Vascular, Abdominal Vascular and Transcranial applications. The clinical option includes in-depth analysis and reporting packages for vascular applications including Transcranial Doppler analysis . Freehand 3D is also provided within this clinical option. This clinical option enables the C5-1, S5-1, L12-3, L15-7io and D5cwc transducers for vascular applications. This clinical option also includes Needle Visualization which utilizes advanced electronic beam steering technology to enhance viewing of the needle to assist the user in guiding the needle to the targeted anatomy – needle visualization requires the L12-3 transducer.

CX50 POC: This clinical option includes Tissue Specific Imaging software and SonoCT for Cerebrovascular, Peripheral Vascular, Abdominal Vascular and Transcranial applications. The clinical option includes in-depth analysis and reporting packages for vascular applications including Transcranial Doppler analysis. Freehand 3D is also provided within this clinical option. This clinical option enables the C5-1, S5-1, L12-3, L15-7io and D5cwc transducers for vascular applications. This clinical option also includes Needle Visualization which utilizes advanced electronic beam steering technology to enhance viewing of the needle to assist the user in guiding the needle to the targeted anatomy – needle visualization requires the L12-3 transducer.

CX50 IUS Client SW streamlines workflow by offering synchronization of Patient ID information already entered into the Allura Xper system, as well as storage of ultrasound images within the Interventional Study folder.

Enables tableside control of ultrasound exams via the Allura Xper Tableside Module (TSM)

Seamless connection with Allura video system supports comfortable viewing of images on interventional exam room monitors

Operational Requirements:

CX50 Release 2 (or later) software release level.

Philips Allura Xper Release 7 (or later) in Interventional Suite.

Allura Xper Integrated Ultrasound option purchased separately. (IUS functionality requires both “client” and “host” software - CX50 IUS option is “client” software).

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| 5 | 2D ICE | 1 |
| | ICE Software is provided by Philips. To use the ICE Software with your CX50, you will need other components. The catheters and interface module can only be purchased from St. Jude Medical. | |
| 6 | Additional AC Power Adapter | 1 |
| | A stand-alone combination switching power supply with medical isolation and intelligent battery charger used to power the CX50 from world-wide AC power mains while charging the system's Lithium Polymer battery. Power adapter allows system to run on AC power. | |
| 7 | Additional Battery Pack | 1 |
| | A multi-cell Lithium polymer smart battery pack that is internal to the CX50. Complies with UL1642, Standard for Safety for Lithium Batteries. 6.4 Amp-Hours minimum (16.8V to 10.8V) 5.17" X 5.360" X 1.14", 840 g. | |
| 8 | Cart with Multi-port Adapter | 1 |
| | Highly mobile cart that features hardware module to support transducer switching among up to three imaging transducers at the touch of a button. Includes: 4 swivel wheels with 2 locking casters, rear handle, micro-positioning grips, quick-connect tray, storage shelf, footrest, internal isolation transformer, B&W printer brackets, integrated transducer connector holder, gel holders and cable management. Includes USB hub for additional connectivity. | |
| 9 | USA Power Cord | 1 |
| 10 | X7-2t Transducer | 1 |
| | Features compact connector designed for reliability and improved ergonomics. Compatible with both EPIQ and CX50 systems. Manufactured in accordance with the European Union's Restriction of Hazardous Substances (RoHS) directive. | |

X7-2t PureWave matrix array TEE Transducer for superior 2D quality. 7 to 2 MHz extended operating frequency range. Includes M-Mode, PW doppler, CW doppler, harmonics, true electrocautery suppression, and adaptive autocool.

Clinical Education

X7-2T Clinical Education; ***1 day of Implementation Onsite Training (expires 90 days after install, provided Mon-Fri during normal business hours), a 2 Day offsite TEE University (expires 365 days after install) and one subscription to E-Echocardiography.com (must be activated within 90 days of code notification). All offsite training includes travel, see travel disclaimer**

****TRAVEL Disclaimer:** Travel & Accommodations for registered attendees. Each tuition includes one (1) participant's airfare from a North American customer location to a Philips North America Ultrasound Clinical Education training location with modest lodging, ground transportation and meal expenses for the course duration. Breakfast/dinner are provided by the hotel and lunch/breaks are catered by Philips Healthcare. All other expenses will be the responsibility of the attendee (ie. Baggage fees, meals while traveling, transportation to and from customer's home airport). Details are provided during the scheduling process. Note: 21 day Cancellation/Rescheduling policy is strictly enforced.

*****Note:** Philips Healthcare personnel are not responsible for actual patient contact or operation of equipment during education sessions except to demonstrate proper equipment operation. The training sessions should be attended by the appropriate healthcare professional as identified by the department director. Repeat training for staff non-attendance will not be accepted. Site must be patient-ready to meet training expectations.

All Tuitions must be registered prior to the expiration date. The course chosen must be taken within 90 days of expiration.

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|-----------|--|----------|
| 11 | L15-7io Transducer | 1 |
| | Features compact connector designed for reliability and improved ergonomics. Manufactured in accordance with the European Union's Restriction of Hazardous Substances (RoHS) directive. | |
| | High frequency compact linear array transducer with 15 to 7 MHz extended operating frequency range for cardiac and vascular surgery, superficial vascular, and MSK applications. (Compact connector) | |
| 12 | English Manual | 1 |
| | Operation Manual | |

Line #	Part #	Description	Qty
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1		30Fr/sec Extension	1
		Frame Rate Extension increases the system acquisition speed for cardiac applications that require high speed imaging. The frame rate extension increases the acquisition speed to 15fps and 30fps with a 1024x1024 matrix.	

2		AlluraClarity_FD20 Ceiling	1
		The AlluraClarity FD20 (Ceiling) single-plane cardiovascular system comprises a ceiling mounted C-arm stand and digital imaging X-ray system for cardiovascular diagnostic and interventional procedures.	
		ClarityIQ technology is the foundation of AlluraClarity systems touching every part of the imaging system.	

ClarityIQ incorporates powerful state-of-the-art image processing technology, developed by Philips research, all working in real-time enabled by the latest computing technology:

- Noise and artifact reduction, also on moving structures and objects
- Image enhancement and edge sharpening;
Automatic real-time patient and accidental table motion correction on live images.
- Flexible digital imaging pipeline
- ClarityIQ systems have a flexible digital imaging pipeline from tube to display that is tailored for each and every application area such as Cardio or Neuro. This gives the flexibility to select virtually unlimited application-specific configurations.
- With ClarityIQ over 500 system parameters are fine-tuned for each application area; the result of years of Philips clinical leadership. It is now possible to filter out more X-ray radiation, use smaller focal spot sizes, shorter pulses, thereby fully utilizing the unique capabilities of the Philips MRC X-ray tube.

The AlluraClarity FD20 system uses an integrated single-host concept. The system is comprised of five functional building blocks: Geometry, X-ray Generation, Image Detection, Viewing, and User Interface. Each functional building block is explained in further detail including accessories.

GEOMETRY

The AlluraClarity FD20 Stand

The Allura stand consists of a ceiling-mounted C-arm. The stand has the following capability:

- The L-arm can be rotated and can be moved in longitudinal direction allowing a three-sided patient approach and total body coverage.
 - L-arm rotation around the patient table: +90, 0, -90 degrees.
 - L-arm longitudinal movement: 300 cm
 - This movement features auto-stops at the parking position, cardio/neuro position and lower peripheral position.

The Allura 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 185 RAO
 - C-arm angulation range (degrees): 90 CA to 90 CR
 - (Full angulation capability determined by patient position)
- In the side position (+90 / -90 degrees position, L-arm perpendicular to patient table):
 - C-arm rotation range (degrees): 90 LAO to 90 RAO
 - C-arm angulation range (degrees): 185 CA to 120 CR or 120 CA to 185 CR
 - (Full angulation capability determined by patient position)
- The stand provides fully motorized fast movements with variable and configurable maximum speed.
 - Variable C-arm rotation speed, up to 25 degrees per second
 - Variable C-arm angulation speed, up to 18 degrees per second
- L-arm rotation and longitudinal movement: motorized and manual
- C-arm depth is 90 cm
- The FD20 Dynamic Flat Detector features Xper Access which allows the flat detector to be positioned in either portrait or landscape imaging modes in 3 seconds.
- The variable source image distance between focus and Dynamic Flat Detector input screen is motorized from 86.5 to 123 cm.
- The stand features BodyGuard a capacitive sensing collision avoidance system for patient protection.

Patient support

The Xper Table

- Patient support with flat carbon fiber tabletop
- Table top length of 319 cm, width 50 cm
- Metal-free overhang 125 cm
- Floating table-top movement of 120 cm longitudinal and 35 cm transversal range.
- Motorized height adjustment from 74.5 to 102.5 cm
- Maximum cantilever of 223 cm , for full patient coverage
- Maximum patient weight 250 kg plus 500 N for CPR (or 225 kg plus 1000 N) in any longitudinal position of the table top
- Xper Geometry and Imaging Modules for exam room controls.
 - The operating modules can be attached to either side of the table.

Patient Support Accessories set

- One cerebral filter
 - Three rail accessory clamps
 - One IV stand
 - One slow recovery foam mattress
 - One Set of Arm Supports (FCV0248)
 - One Set of Patient Straps (FCV0250)
 - One Head Support (FCV0251)
 - One Arm Support (FCV0258)
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- One Table-mounted Radiation Shield
- One anti-fatigue mat with Philips logo

X-ray Generation

The AlluraClarity FD20 comprises an integrated dedicated X-ray system, micro-processor controlled Certeray generator based on high frequency converter technique. The user interface control of this X-ray Generator is incorporated in the Xper module, Xper Desktop Viewing Console, and the Xper on-screen displays.

- The Certeray generator comprises:
 - X-ray generator: 100 kW
 - Voltage range: 40 - 125 kV
 - 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, 25, 30 frames/s).
 - Minimum exposure time of 1ms.
 - ECG triggered acquisition: allows acquiring one exposure for each QRS peak with selectable delay time
 - Automatic kV and mA control for optimal image quality prior to run to save dose
 - Optimal X-ray tube load incorporated in the Certeray generator
- An X-ray collimator with single semi-transparent wedged filter with manual and automatic positioning.
- SpectraBeam filtering of low energy radiation to optimize image quality and dose efficiency with the MRC-GS 0508 X-ray tube.
- Xper Beam Shaping, which means that, both shutters and wedges can be positioned on the Last Image Hold without the need for X-ray radiation.

Fluoroscopy

- Three programmable fluoroscopy modes
 - Each mode can be set to different composition of dose rate, pulse speed, filter setting, and image processing (noise reduction, adaptive contour enhancement, and adaptive harmonization).
- Roadmap Pro
 - Roadmap Pro can be selected from the Xper imaging module and/or Xper module.
 - A vessel map is created and superimposed with (un)subtracted live fluoroscopy. Acquisition runs can be done during Roadmap without losing the vessel map. Roadmap Pro features Smart Settings in special clinical modes that are optimized to visualize special materials such as coils and glue. Live processing of the vessel map, the device map and the landmark map can be done on the Xper Module. Xres for vascular procedures is standard part of Roadmap Pro.
 - **Disclaimer:** AMC only corrects movement artifacts in two dimensions. Three dimensional movements such as swallowing or rotation of the head cannot be corrected.
 - In Roadmap Pro R2 "Automatic Motion Compensation" (AMC) is added to the roadmap functionality. During roadmap, small movements of the patient can lead to subtraction artifacts. These artifacts might conceal important clinical information. "Automatic Motion Compensation" compensates for rigid, uniform (skeletal/table) translations and is

therefore very effective in interventional (neurology) applications where subtraction imaging is applied.

- Disclaimer: AMC only corrects movement artifacts in 2 dimensions. 3 dimensional movements like swallowing or rotation of the head cannot be corrected.
- Xper Fluoro Storage, a grab function allows storage and archiving of both a fluoro image and the last 20 seconds of Fluoroscopy, called Xper Fluoro Storage. These fluoro images or fluoro runs can be archived as a regular exposure run.

X-ray tube

The AlluraClarity FD20 has the Maximus ROTALIX Ceramic grid switch tube assembly MRC 200 GS 0407 integrated in the C-arc. This MRC tube has an anode heat storage capacity of 2.4 MHU and 0.4/0.7 mm. nominal focal spot values. The tube has a maximal loading of 30 and 67 kW.

Dynamic pulsed fluoroscopy uses grid switching technology to eliminate soft radiation and improve image quality. SpectraBeam allows for filtration of the x-ray beam with (a combination of) 0.2, 0.5 or 1 mm CU-equivalent filters.

Tube housing ROT-GS 1004 is for oil-cooling and has a build-in thermal safety switch. A rotor control unit is build-in for continuous rotation of the anode disk. The heat exchanger CU 3101 is for direct and continuous forced cooling with oil.

IMAGE DETECTION

The AlluraClarity FD20 comprises the following image detection chain:

- A 30 cm by 40 cm FD20 Dynamic Flat Detector with eight imaging modes.
 - 30 x 38, 30 x 30, 26 x 26, 22 x 22, 19 x 19, 16 x 16, 13.5 x 13.5, and 11 x 11 cm
- The digital output of the FD20 flat detector is 2k*2.5k image matrix at 16 bits depth for the largest mode
- The flat detector subsystem features Xper Access, the detector can be rotated over 90 degrees, it moves from portrait to landscape back & forth
- DQE (Detective Quantum Efficiency) >77 %
- The pixel pitch: 154 x 154 microns

Viewing

The AlluraClarity FD20 comprises the following components in order to display the clinical images in the control and examination room:

Displays

Examination Room

Two 19-inch monochrome LCD monitors designed for medical applications. The first display is used for viewing live images. The second display is the reference monitor.

- 19-inch monochrome TFT-LCD display with a 160 degree viewing angle.
- Native format 1280x1024 SXGA
- 10-bit gray-scale resolution with gray-scale correction

These monitors are not delivered when FlexVision XL, EP Cockpit or EP Cockpit XL is selected.

The monitor ceiling suspension in the exam room can be configured to accommodate 3, 4, 6 or 8 LCD monitors and includes motorized height adjustment. The height-adjust feature is dependent

on the room ceiling height. When FlexVision XL, EP Cockpit or EP Cockpit XL is selected the monitor ceiling suspension is configured for one of those options.

- Of the two medical monochrome LCD monitors included in the MCS, one is used for viewing of live images and the other serves as the first reference display. Reference images or runs are controlled by infra-red remote-control Xper ViewPad.
- The On-Screen Display provides status information on stand rotation, angulation, 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 skin dose. For cardiac applications, the system also monitors and displays body zone specific Air Kerma data (10 zones).

Control Room

One 19-inch color LCD monitor used as a data monitor.

- 19-inch color TFT-LCD display
- Native format 1280x1024 SXGA

One 19-inch monochrome LCD monitor (Xper review monitor) designed for medical applications.

- 19-inch monochrome TFT-LCD display
- Native format 1280x1024 SXGA
- 10-bit gray-scale resolution with gray-scale correction

These control room monitors are not delivered when EP Cockpit or EP Cockpit XL is selected.

The Graphical User Interface on the monochrome monitor has the following features and functions:

- Step through file, run, or images
- File, and run overview
- Contrast, brightness, and edge enhancement settings
- Flagging of runs or images for transfer
- Applying text annotation in images
- Optional DICOM printing
- Executing Quantitative Analysis Packages if available
- Subtraction functionality
- Zoom/pan functionality
- Electronic shutters
- Video invert
- View trace, stacking of images
- Landmarking

Acquisition

The acquisition segment coordinates the parameters for automatic exposure control. The program is selected via the Xper module or Xper Desktop Console.

Exposure techniques:

- Serial imaging for DA and DSA with automatic exposure setting
- Single shot mode
- Acquisition frame rates:
 - 0.5 to 6 fps at 2048 x 2048
 - 15 and 30 fps at 1024 x 1024

The AlluraClarity FD20 offers a storage capacity of:

- 50,000 images at matrix size of 1024 x 1024
- 12,500 images at matrix size of 2048 x 2048
- Maximum number of examinations is 999, with no limit to the maximum number of images per examination

USER INTERFACE

Xper is comprised of three elements: 1) Xper Settings, which customizes the system to each user preferred settings. 2) Xper User Interface 3) Xper Integration, which makes advanced integration functionality available such as DICOM Query / Retrieve, background archiving, and Xper Fluoro Storage.

The Xper User Interface uses User Interface modules in the Examination Room with On-Screen Display.

The On-Screen Display is positioned on the left side of the reference monitor. The following system information is displayed

- X-ray indicator and X-ray tube temperature condition
- Gantry position in rotation, angulation, and Source Image Distance
- Detector field size display
- General System messages
- Selected Frame speed
- Fluoroscopy mode
- Integrated fluoroscopy time
- Skin Dose and Dose Area Product
- Stopwatch

The Xper ViewPad contains the preprogrammed function settings. The system is provides with two Xper Viewpads. The following functions are provided:

- Run and image selection
 - File and run cycle
 - File overview
 - Store to Reference image file
 - Copy image to photo file
 - Digital (fixed) zoom and panning
 - Recall reference images
 - Laser pointer, intended to point at regions of interest on the imaging monitors
 - LED indication of laser pointer on/off and battery low
 - Subtraction on/off
 - Remasking
 - Landmarking
-

Remote Intercom

The separate intercom which is connected independently from the system that allows separate placement of the intercom at the preferred working position in the control room and examination room.

Table Side Modules

Two Xper Modules are provided for use. The first Xper Module is mounted tableside. The Second Xper Module (NCVA778) is located in the control room. These modules use a touch screen, which can be operated when draped with sterile covers. The Xper Module contains the following functionality:

- Acquisition settings
- Selection of Xper Setting allows the user to set frame rates and X-ray generation settings applicable for the type of the preferred intervention
- Image Processing

The Xper Geometry module can be positioned on all sides of the patient table, while keeping the button operation intuitive. The Xper Geometry module provides the following functionality:

- Tabletop float and table height position
- Source Image Distance selection
- Longitudinal movement of the Gantry along the ceiling
- Gantry rotation in an axis perpendicular to the ceiling
- Store and recall of two scratch gantry positions including SID
- Emergency stop button

The Xper Imaging module can also be positioned on three sides of the patient table, while keeping the button operation intuitive. The Xper Imaging module provides the following functionality:

- Fluoroscopy Flavor selection defined per Xper Setting
- Shutters and Wedge positioning
- Xper Fluoro Storage and Grab
- Selection of the Detector field size
- Shutter positioning
- Reset of the fluoroscopy buzzer

Pan Handle

- The Pan Handle is an extension of the control facility for floating movements of the tabletop.

Control Room

The control room comprises a Xper Review Module, Xper Desktop Module, a keyboard, and a mouse. The Xper Review Module offers the basic functions for review. The Xper Review Module contains the following functionality:

- Power on/off
 - Tagarno wheel to control the review of a patient file
-

- File and run cycle
- Contrast, Brightness, and Edge enhancement settings
- File, Run, Image stepping and run and file overview
- Delete run
- Image invert and digital zoom
- Reset fluoroscopy timer and enable/disable X-ray

System information is displayed on the bottom of the data monitor:

- Stopwatch and Time
- System guidance information
- Dose Area Product (DAP) and Skin Dose, and accumulative dose
- Frame speed settings, fluoroscopy mode, and accumulated fluoroscopy time
- Exposure and fluoroscopy settings as Voltage (kV), Current (mA) and pulse time (ms)
- Geometry information as rotation, angulation, and SID

Scheduling

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 Allura 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 QA results file.

Preparation

The preparation page provides the information of the room and patient preparation of each individual physician. The preparation page is customizable per Xper Setting and allows each physician to provide his own room protocols. This preparation page makes hard copies of the protocol instructions redundant.

Acquisition

The acquisition page contains information on the current selected patient.

Review

The review page allows for reviewing of patients:

- Previous examination cases
- Review of other DICOM XA or DICOM SC studies

Vascular Quantification Software Package

Functions:

- vessel diameter / stenotic index

- automated vessel analysis
- calibration routines

In addition the package allows manual measurements of line lengths (absolute and ratio's) and angulations. Multiple measurements in one image are possible.

RIS/CIS DICOM Interface

This package allows communication of the Allura Xper system with a local information system (CIS or RIS). The interface uses the DICOM Worklist Management (DICOM WLM) and Modality Performed Procedure Step (DICOM MPPS) standards.

If a hospital has an Allura Xper system and an information system it can receive patient and examination request information from the information system and report examination results in order to:

- Eliminate the need for retyping patient information on the Allura Xper
- Prevent errors in typing patient names and registration numbers (ensuring consistency with IS information to prevent problems in archive clusters auto-search for a name in case of later retrieval)
- Inform the IS about the acquired images and radiation dose

Upon request from the Allura Xper system the complete worklist with all relevant patient and examination data is returned from the IS to the Allura Xper system. For each patient the following information will be shown on the Allura Xper after it has been retrieved from the IS:

Patient Identification:

- Patient name
- Patient ID
- Birth date
- Sex

Examination/Request Information:

- Accession number
- Scheduled procedure step start time
- Scheduled performing physician's name

It is possible at all times to enter patient demographics information manually within the Allura Xper system in case of an emergency or in case the local Information System connection is down.

On request of the clinical user the Allura Xper will report the following information about the selected patient to the IS:

Patient Identification:

- Patient name
- Patient ID
- Birth date
- Sex

Examination/Request Information:

- Accession number
-

- Performed procedure step status start/end date and time
- Performing physician's name
- Referenced image sequence

Radiation dose:

- Total time of fluoroscopy
- Accumulated fluoroscopy dose
- Accumulated exposure dose
- Total dose
- Total number of exposures
- Total number of frames

Further detailed information can be found in the Allura Xper DICOM Conformance Statement.

The interface requires an EasyLink (hardware and software) if the IS is not compliant with DICOM Work List Management and Modality Performed Procedure Step.

Radiation Dose Structured Report 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, for example:

- Quality improvement: evaluating trends in X-ray dose performance per facility, system and operator.
- RDSR enables analysis of average dose levels & variance for routinely performed exams and procedures.
- Typical system usage can be extracted from the data.

Secondary Capture Dose Report

- The Secondary Capture Dose Report function allows the user to save & transfer, manually or automatically, a patient Dose Report to PACS in DICOM secondary capture format.
- The dose report will be stored in the related patient image folder.

Archive

Continuous Autopush (NCVA090)

Continuous Autopush is an archive accelerator, which ensures that background archiving continues with minimal disruptions.

Clinical studies can be archived to a CD or a PACS. The archive process can be completely automated and customized with Xper Settings. Parameters like multiple destinations, archive formats can be selected to the individual needs and wishes for programming under the Xper Settings,

The Xper DICOM Image Interface enables the export of clinical images to PACS. 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 export format is configurable in 512x512, 1024x1024 2048 x 2048 (unprocessed) matrix.
- The examination can be sent to multiple destinations for archiving and reviewing purposes.
- The Xper 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 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 the Allura Xper System

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.

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.

In the event that your main FD system will be dedicated to Cardiac applications your offsite training course will be tailored to focus on the Cardiac functionality.

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. **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.**

Handover OnSite Education:

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).**

Education expires one (1) year from equipment installation date (or purchase date if sold separately). Ref #106107-110915

The FlexVision XL8 input package provides eight isolated wall connection boxes.

Isolated Wall Connection Box

This Isolated Wall connection Box facilitates connection of the video source via standard DVI cable/connector and lossless transfer of the video signal over the approximate 30 m cable distance. It can be mounted in the exam room or in the control room, depending on the location of the video source.

The quantity of the VWCB's has to be calculated as follows:

For each video signal to FlexVision XL on Vascular System: 8 VWCB

Note:

No VWCB is required in case a video signal is connected directly to a dedicated LCD from the following sources:

- 1) Xper Live/ref Slaving
- 2) Interventional HW (XtraVision), ViewForum, Xcelera (only if workstations are powered by Allura Xper)
- 3) Xper IM

4	Prep table for Table Mount inj	1
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This is only applicable when the Mark 7 Arterion Table Mount injector will be ordered locally. Prepared for Table Mount Injector prepares the XperTable with the cabling needed for a Table Mount install of the MEDRAD Mark 7 Arterion injector head. This preparation will facilitate the install of the Table Mount injector system. It will save an estimated 4 - 8 hours of installation time. The injector base unit can be placed in the technical room, and User Interface and display can be placed in the control room or on the wall of the exam room.

The prepared for Table mount injection table option cannot be purchased in combination with the Swivel AND prepared for Volcano Core option.

5	XL screen video-share slaving	1
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The XL screen video-share interface enables to share all information being presented on the large 56-inch screen in the Examination Room.

The XL screen video-share interface provides two, simultaneously available, video outputs:

- A full resolution video-output (Quad HD = 3840*2160 ; 8 MegaPixel)
- A downscaled resolution video-output (HD = 1920*1080 ; 2 MegaPixel).

The full resolution 8MP video-output is compatible with the following Dual DVI 3rd party monitors:

- Barco 56-inch: CML5682W4
- Eizo 56-inch: Radiforce LS560W
- Eizo 60-inch: Radiforce LX600W

The downscaled 2MP resolution video-output can be used to connect to a (3rd party) HD display or to a 3rd party recording/streaming/reviewing solution.

Note: The information provided at the 3rd party monitors (2 & 8MP) video output cannot be used for diagnostic purposes.

6	Addl sets of documentation	1
	Set of black and white copies of all documents, comprising (if applicable):	
	<ul style="list-style-type: none">• User manuals• Service manuals• System manuals• Test results	
7	FlexVision XL,XperHD,Snapshot	1
	FlexVision XL is an integrated viewing solution designed to give you full control over your viewing environment.	
	The FlexVision XL provides the ability to:	
	<ul style="list-style-type: none">• Display information from up to 8 sources simultaneously (incl. third party systems) on the Philips 58-inch color LCD with LED backlight in the Exam Room.• Resize and/or enlarge information at any stage during the case.• Select and customize viewing lay-outs of the Philips 58-inch color LCD via the Xper table-side module• Overview connected equipment (incl. third party systems) from a single location.	
	XperHD on FlexVision XL brings High Definition viewing for clinical images. Native resolution of FD20 can be displayed. Excellent sharp and crisp clinical images can be displayed at full size without digital zoom.	
	Xper HD brings:	
	<ul style="list-style-type: none">• High Definition imaging<ul style="list-style-type: none">- Sharp images at full size without zoom• High Definition display at native resolution<ul style="list-style-type: none">- Up to 2k*2k image display fully integrated• High Definition for the ultimate detail<ul style="list-style-type: none">- Enhanced small vessel visualization	
	The FlexVision XL consists of:	
	<ul style="list-style-type: none">• DVI video composition unit.<ul style="list-style-type: none">o 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 Exam Room.o The DVI video composition unit is operated from the Xper tableside module.o The DVI video composition unit supports a wide variety of display formats (up to 1920x1200)o Up to 9 external inputs are connected to the DVI video composition unit via Wall Connection Box(es).• Medical grade, high resolution color LCD in the Exam Room<ul style="list-style-type: none">o This display supports the image quality requirements for monochrome X-ray images as well as color images and replaces all displays normally delivered with an Allura Xper FD or AlluraClarity system for the Exam Room.o Main characteristics are:<ul style="list-style-type: none">- 58-inch, 8 Megapixel color LCD- Native resolution: 3840x2160	

- Brightness: Max: 700 Cd/m2 (typical) stabilized: 400 Cd/m2
- Contrast ratio: 4000:1 (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
- Large color LCD control (Xper Module)
 - o Resize and/or enlarge information at any stage during the case via the Xper tableside module in the Exam or Control Room
 - o Select viewing lay-outs via the Xper table-side module in the Exam Room
 - o Create new layouts by matching inputs to desired locations on preset templates.
- Monitor Ceiling Suspension
 - o Monitor ceiling suspension for use in the Exam Room carries the 58-inch color LCD screen, 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.
- Snapshot
 - o The snapshot function allows the user to store/save a screen-capture of any image on the 58-inch display as a DICOM Secondary Capture image to a connected PACS. The snapshot-all function allows the user to store/save a screen-capture for each displayed image in the Exam Room / Control Room as separate DICOM Secondary Capture images .

8

Set of 2 additional 21in. LCDs 1

Two 21inch additional displays are located on top of the monitor ceiling suspension frame which carry the 56 inch large screen color LCD display.

These 2 additional LCD's can be used to display additional video sources or used as display back up for Hemo and Xray Live images. These LCD's have a fixed content.

Main characteristics of back-up displays are:

- 21.3 inch, 2 Megapixel color LCD display
- Max. resolution: 1600x1200
- Brightness: 450 Cd/m2
- Contrast ratio : 550:1
- Wide viewing angle (approx. 170 degrees)
- Constant brightness stabilization control
- Independently selectable brightness settings for monochrome and color images
- Independently selectable lookup table for gray-scale, color and DICOM transfer function

FCV0587, "XPer Live/Ref Slaving" required when displaying X-Ray Live as back-up.

9

Xper Flex Cardio on XperModule

1

The "Hemo" menu will contain a subset of the Xper Flex Cardio features. The Allura Xper module interface acts as a remote control to the Xper Flex Cardio system. Changes selected on the Allura Xper module will be displayed on the Xper Flex Cardio system, all functionality for the selected functions are controlled within the Xper IM application.

- SNAP (Auto record)
- Obtain/Capture and store hemodynamic waveforms and ECG's
- Cardiac Output measurements
- Monitor scale and sweep speed
- FFR measurements
- NIBP measurement

2nd REF for FlexVision XL is optional on FlexVision XL. Second Ref images will be displayed on the large screen monitor.

This kit contains a video splitter, a wall connection box and cable set for one slave monitor. Connection box and slave monitor are not powered by Allura.

This interface provides image output to standard line rate video peripherals, such as VCRs or paper printers. This option also comprises automatic start and stop of a VCR, synchronous to the generation of X-ray (fluoroscopy and exposures).

The Automatic Position Controller (APC) for Integris Allura Flat Detector systems provides two modes of operation:

- Preset Position Sequence; the sequence of projections is determined per Xper Settings. Each set contains a maximum of 10 positions. Positions can be recalled in sequence or directly. The projection sequence comprises rotation, angulation, and SID settings, related to the selected reference image.
- Reference driven positioning. The projections on the reference monitors can be recalled with the push of a button. The reference driven positioning recollects the rotation, angulation, and SID.

The Automatic Position Controller (APC) for the table provides two modes of operation:

- Auto positioning. The tabletop position and table height will be adjusted automatically to the pre-defined default point of interest. This to save time and x-ray dose at the start of an exam or for setting up the system for rotation scans.
- Store/recall of a position of the table top. This includes the height-, longitudinal- and lateral position of the table top.

Rotational angiography provides real-time 3D impressions of complex vasculature and coronary artery tree. It acquires multiple projections with just one contrast injection via a fast rotational scan of the region of interest.

Rotational Angiography can be used during screening procedures to quickly determine the optimal projection for the study as the angle (rotation/angulation) of the projection is indicated on each image.

Compared with traditional angiography, Rotational Angiography can save considerable time, dose and contrast, while providing image detail required for diagnostic and therapeutic decisions.

A rotational scan is possible both with the Allura Xper 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: 305 degrees

Max. Frame speeds are given by the framespeed specifications of the system configuration.

The speed and range of rotation are the highest available (see table). The very high 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.

Operation of Rotational Angiography is extremely easy. The procedure is selected, set up and executed virtually in a matter of seconds, supporting the highest patient throughput.

A set of dedicated acquisition programs is available on the Xper Module and can be selected at the touch of a button. The rotation end- and start-positions are easily selected. The procedure is controlled from the exposure hand- or footswitch.

XperSwing allows dual-axis rotational coronary angiography to gather more information in less time and with less X-ray and contrast dose. XperSwing acquires simultaneous RAO/LAO cranial-caudal views in just one acquisition run by moving the C-arm in a curved trajectory instead of multiple acquisitions. XperSwing can be used during screening procedures to quickly determine the optimal projection for the study as the angle (rotation/angulation) of the projection is indicated on each image, providing image detail required for diagnostic and therapeutic decisions and to obtain a real-time 3D impression of the coronary artery tree.

In total seven pre-programmed trajectories are available:

- Three for Left coronary imaging
- Two for Right Coronary imaging,
- Two generic trajectories.

The choice depends on size and weight of the patient. These trajectories are designed to fully cover all conventional projections for a diagnostic coronary angiography. Rotation and angulation movements are combined in one complete scan trajectory, using the maximum rotation and angulation speed of the Allura system. (55 resp 30 degr/sec). XperSwing is possible in the side position (ceiling mounted systems) and in the head position

XperSwing functionality includes, but is not limited to

- 15 frames per seconds acquisition to allows using of less contrast.
- Wide rotation range provides a complete evaluation of the anatomy.
- Precise positioning and high reproducibility, assuring you of high quality images and excellent subtraction studies.
- Set up and executed in a matter of seconds.
- Set of dedicated acquisition programs with the trajectories available on the Xper Module
- The rotation end- and start-positions can be selected.
- Acquisition procedure is controlled from the exposure hand or footswitch.

17

Subtracted Bolus Chase

1

For visualization of vessel structures when the blood flow is difficult to estimate, in particular in the lower peripherals.

Bolus Chase solves the problem of cumbersome step movements, the mismatch between blood flow and selected program, and lack of real-time image information.

During digital acquisition in non-subtracted mode with uninterrupted real-time image display, the contrast bolus is followed (chased) interactively by a motorized table scan movement using a hand-hold speedcontroller to adapt the speed of the table scan to the contrast flow. The framespeed can be adapted as well.

The bolus run is followed with a mask run while using the same speedcurve and framespeed as generated during the bolus run. Viewing is possible in the subtracted and non-subtracted mode. If subtracted viewing is not required, the mask run can be skipped.

Subtracted Bolus Chase gives fast, accurate results for increased patient throughput and improved patient management. Automated exposure control and precise speed control assure a high quality images and excellent subtraction studies.

- automatic exposure control
- tabletop motordrive and hand-held speed controller (tableside)
- technique selection using Xper module, available both tableside and in control room (Xper FD20, FD20/10)

Storage extension

Allura Xper FD20 systems the storage is increased from:

- Allura Centron system the storage is increased from:

- Power requirements:
refer to system configuration

Dual Fluoro for Flat detector systems

This option provides an additional fluoro channel in parallel to the default fluoro channel. The Dual fluoroscopy mode is selected via the Xper module.

In Dual Floro mode, The fluoroscopy image on the exam montitor can be zoomed digitally with a factor 2, providing a larger view of the region of interest for complex interventions. The fluoro zoom function is controlled via the Xper module.

SmartMask simplifies roadmapping procedures by overlaying a selected reference image with fluoroscopy on the live monitor in the exam room.

SmartMask uses the reference image displayed on the reference monitor.

SmartMask facilitates pre- and post- intervention comparisons to assess treatment results

21 FULL AUTOCL

The AutoCal option is a software package to be used in conjunction with quantitative analysis software packages. It provides an auto calibration procedure for an object to be analyzed that is placed in the iso-center. When the object to be analyzed (e.g. Left Ventricle Vessel Segment) is placed in the iso-center AutoCal avoids the need to:

- acquire an additional image series containing a sphere or grid for calibration purposes
- calibrate manually on a calibration object (e.g. catheter) displayed in the image or image series to be analyzed

1

Left Ventricular Quantification Software Package. Software package for the analysis of single plane Left ventricular angiograms. Calculates the Ejection fraction and local wall motion parameters in different formats.

Functions:

- Various LV-volumes
- Ejection Fraction
- Cardiac Output
- Centerline Wall Motion
- Slager Wall Motion
- Regional Wall Motion
- Calibration routines

In addition the package allows manual measurements of line lengths (absolute and ratio's) and angulations. Multiple measurements in one image are possible.

Comprising:

- software license

Compatible with:

. Allura Xper FD 10 Rel 3 and FD10/10 Rel 2 onwards

. Allura Xper FD20 Rel 2, FD20/10 Rel 2 onwards

1

Functions:

- diameter measurement along the selected segment
- cross sectional area
- %-stenosis
- pressure gradient values
- stenotic flow reserve
- calibration routines

In addition the package allows manual measurements of line lengths (absolute and ratio's) and angulations. Multiple measurements in one image are possible.

Comprising:

- software license

Compatible with:

- . Allura Xper FD 10 Rel 3 and FD10/10 Rel 2 onwards
- . Allura Xper FD20 Rel 2, FD20/10 Rel 2 onwards

24

Xcelera on Xper Module

1

This option integrates the Xcelera network application in the Allura Xper system.

It allows operation of the Xcelera viewer with the Xper module in the examination room during an examination.

Display of Xcelera imaging in the examination room has to be arranged for the monitor ceiling suspension

with an additional monitor or with MultiVision (sharing an existing monitor).

Following Xcelera viewing functions are available on the Xper module:

- study selection
- replay control (start/stop/autocycle, run step, image step)
- Report selection (with page step, close report)
- image settings (adjust Contrast, Brightness, Edge enhancement) and reset to original settings

25

Wireless footswitch: mono-plane version

1

The wireless footswitch is an option for our Allura systems. It provides the possibility to have one wireless footswitch in the exam room.

A wireless footswitch provides workflow optimization, flexibility at table-side, removes cable clutter on the floor and provides easier cleaning of the footswitch.

The mono-plane wireless footswitch is a 3 pedal version; one pedal for fluoroscopy, one for exposure and one to control the roomlight/single shot. The pedals can be configured according customers preferred lay-out.

The wireless footswitch is working via RF technology and is fully tested and released for medical use. It has an active range up to 10 meters, depending on structures within this range.

The wireless footswitch has a lithium battery which only needs to be recharged once per week. During recharging the footswitch still can be used and is fully functional. In parallel, a wired footswitch can also be used.

The status of the battery is indicated by an LED-indication on the footswitch itself, so that the user can decide when the footswitch needs to be recharged.

The wireless footswitch can easily be cleaned in water. It has the highest water ingress protection standard (IPX8).

The wireless footswitch has an on/off switch. It can be switched off when not in use. When the footswitch is active, but not in use, it will go into a sleep-mode. It will be re-activated when touched or when one of the pedals is pressed.

26

CX50 Video and UI coupling

1

The CX50 Integrated Ultrasound feature has been designed to easily and efficiently integrate ultrasound into the interventional suite.

Patient data:

Allura Xper patient information automatically transfers to the CX50

X-Ray and ultrasound patient studies may be configured with unique or identical study IDs to easily store and locate studies in DICOM

Image display:

The CX50 video output displays on the exam room LCD monitor

Integrated controls:

The Allura Xper Tableside Module remotely controls specific ultrasound modes and functions, including:

Modes: 2D, Color Doppler, Color Power Angio (CPA), Clinical presets

Functions: Zoom, Focus, Depth, Gain, iSCAN one-button optimization, Freeze, Acquire, Caliper, Replay, 2D Sector Width, Color Region of Interest, Biopsy Angles

Mouse interaction: remotely control the CX50 at the tableside using a mouse and tablet

- 27 Cath Arm Support 1**
For brachial catheterisation and digital imaging technique
The support is made of X-ray transparent material with exception of the fixingclamp and pivots.
- 28 Pulse Cath Arm Support 1**
Facilitates catheterization through the pulse and provides room for placing catheterization instruments. It is a flat radio translucent board and is placed under the patient while a part projects at either the left or right side of the tabletop to support the arm.

Size: 100 x 85 cm
Material: carbon-fibre reinforced material
- 29 **NCVA101 Peripheral X-ray Filter 1**
Set of flexible x-ray filters to provide an uniform density in angiographic examinations of the lower peripheral area.
Comprising:
• one central filter, at the top edge provided with sizing markers at every 5 cm, length : 1 m
• two side filters, length: 1 m
- 30 Pivot for table base. 1**
For angiographic- and interventional procedures of the upper peripherals.
Provides improved table access for patient transfer.
Allows pivoting of the table base around its vertical axes.
Pivot range from -90 degrees to + 180 degrees (or -180 to +90 degrees) with locked positions on 0, -13/+13 (facilitating arm-angiography) and -90/+90 and 180 degrees.

Comprising:

• pivot device with graduated scale to be mounted on the universal floor plate of the table.

Compatible with Xper Table
- 31 Xper Table Tilt 1**
This innovating SyncraTilt enhances the accuracy and efficiency of gravity-oriented procedures. It is available as an option for the Xper table in Allura Xper series systems.

SyncraTilt is ideal for interventional, myelography, phlebography and head down procedures because it provides more precise imaging of contrast medium, blood, or objects in the body.

With SyncraTilt, the isocentre is automatically located at the isocentre of rotation and angulation of the stand. If the longitudinal position of the stand changes, the tilt isocentre is changed to match with the new stand position. As a result, the region of interest is always centred

As the table tilts, the X-ray beam automatically coordinates to the movement.
-

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, SyncraTilt enables phlebography to be performed with a head-up tilted patient.

The option provides:

- 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 35cm)
 - easy to use controls
- Comprising:
- Tilt drive with user controls`

Compatible with:

- . Xper table in Allura Xper FD series Rel 3 onwards (monoplane versions) and Rel 2 onwards (biplane versions)
- . Bolus Chase
- . Pivot for table base
- . swivel for table base

32	Cradle extension	1
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This extension provides the possibility to cradle the table top.

This allows optimal positioning of the patient for f.i. more invasive (surgical) or guided puncture procedures.

Functionality:

- . isocentric cradle with maximum cradle range: -15 degrees to +15 degrees for the full tilt range
- . cradle speed: 3 degrees/sec
- . automatic safeguarding system with manual override
- . easy to use controls

33	Table top brake kit for the Xper Table	1
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The table top brake kit prevents the table top from floating in case of a power off situation.

A friction brake is applied to stop the longitudinal and lateral movement of the table top.

34	Table base Auxiliary OP rail	1
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Auxiliary OP Rail at table base.

To tidy up the lab via an additional mounting possibility.

35	Long mattress cardio	1
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Patient mattress, thickness 70 mm, length 3165 mm, width 500 mm

36	Add.op-rail with cable ext.kit	1
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The content of the additional OP-Rail kit is:

- [A] One additional OP-Rail (mechanical)
- [B] Cable Extension for OP-Rail
 - One Extension cable for Geo Module
 - One Extension cable for Imaging Module
 - One connection box (wherein the extension cables are coupled with the UI-Module cables.

[A]

- An extension for the table op-rail (30cm).
- The additional op-rail can be mounted at the both sides of the tabletop part where no op-rails are mounted.
- The additional op-rail is compatible with AD5 and XperTable (cardio and neuro) patient-tabletops.
- The op-rail has the same profile /dimensions as the current standard op-rail
- The maximum load (downwards) on the additional op-Rail is 100 N ($F=100N$)
 - (this is limited by the tabletop of the Patient Table)
- The maximum mechanical moment on the additional op-Rail is 40Nm downwards and 20Nm upwards
 - (this is limited by the tabletop of the Patient Table)

[B]

- The cable extension consists out of two cables with a length of 1.3 m; one for the Geo and one for the Imaging module, and an interface box were the coupling to the
- Geo and Imaging module cables can be made.

37

CABLE CARRIER CS

2

Additional carrier for suspension of cable hose from X-ray tube assembly or TV monitor.

38

Personal Dose Meter (1 piece)

10

Personal Dose Meter.

The Personal Dose Meter (PDM) is a small and easy to wear active Xray dose meter intended to measure

and store received Xray dose of staff, present in an Xray room during radiation. The PDM has build-in

wireless communication to connect to the DoseAware Base Station for real time dose-rate indication and

has a long battery life for maintenance-free usage. In addition it can be personalized to increase interest

and awareness. The PDM not only records warning level profiles every second for a total of 3600 sec

(cyclic overwritten), but also stores accumulated dose data every hour for maximum 5 years.

A clip and a lanyard holder are included to facilitate easy wearing.

The PDM can be configured via the cradle and DoseView (and the optional Dose Manager) software for the following attributes:

- Full name (max 40 bytes)

- Display user name (max 16 bytes)
- User group from list
- PDM ID (max 16 characters)
- Position on body
- Date & time = Real Time Clock, synchronized with local time, and being the clock master for the DoseAware system. With each
- connection PDM => Base Station => Dose Manager the timing is synchronized automatically.
- Date of PDM assignment to a person
- Dose history reset
- Sleep mode On/Off
- Annual dose limit

The PDM has following specifications:

- Operational unit: HP10
- Dose range: 1 μ Sv – 10 Sv
- Dose resolution: 1 μ Sv
- Dose uncertainty: 5% or 1 μ Sv
- Dose rate range: 10 μ Sv/hr - 50 mSv/hr
- (3 nSv/s - 15 μ Sv/s)
- Response time: < 4 s, 40 μ Sv/hr – 100 μ Sv/hr; < 1 s above 100 μ Sv/hr
- Energy dependency X-, Gamma-rays: N40-N160 (33keV – 118 keV)
- Average battery life: 3 – 5 years, depending on daily use
- Weight: 30 gr
- Dimensions: 45 x 45 x 10 mm (w x h x d)
- Personalization: 8 inlays with colour
- Communication radio: Center frequency 868.3 Mhz for Europe version
915 Mhz for USA version

39

Personal Dose Meter rack

2

This stainless steel rack facilitates storage of up to 5 ea Personal Dose Meters.

Intended to be mounted on a wall.

Dimensions: 40 x 19 x 6 cm (W x H x D)

Weight: 0,4 kg

40

Base Station Package

1

The Base Station is the heart of the DoseAware system that helps staff, wearing a PDM in the Xray

room, by seeing the level of received Xray dose, to increase awareness and to stimulate taking measures

to reduce received dose.

It offers Online View, which displays real time dose rate and immediate dose data for any Personal Dose

Meter (PDM) in range. The Walk-Up View enables easy access to personal dose history and PDM settings.

The Base Station has a touch screen interface and wireless communication with the PDM. The PDM

dose information is stored within the Base Station and can be retrieved by the optional DoseAware Dose

Manager software via a standard network interface to complete the DoseAware system with archiving and reporting functions.

The Online screen shows up to eight PDM's in range simultaneously. For each PDM the name is shown

next to a bar graph that displays real time the actual measured dose rate level separated in three colored

zones: green, orange, red.

These colours symbols:

Green: the user is in the comfort zone, aware of radiation, adequate precautions have been taken

Red: the user is out of the comfort zone, precautions (like distance, shuttering, lead protection, Xray filters, fluoro flavor, position in the room, applied projection) can be taken to reduce received radiation.

The max dose rate of each zone is marked in $\mu\text{Sv/h}$ on top of the scale. In addition the dose rate peak

level of the actual Xray exposure is displayed as a single block, that is kept visible for max 10 sec after exposure end.

The touch screen also allows access to data stored in the PDM in range. The Walk-up view can show all

configured attributes of the PDM, the actual battery status, and personal dose overviews (accumulated

dose per hour, per day, per week and over the year as percentage of the annual dose limit)

The Base Station package includes also:

- a cradle and the DoseView software package that can be installed on a local PC (not included), which has Windows XP or Vista as operating system.
- Mounting material for the Base Station, facilitating mounting on a wall or on a Philips Monitor Ceiling Suspension or a Philips mobile C-arm system.

The compact cradle connects a PDM to a PC via a USB 2.0 port. In combination with the DoseView package it offers PDM-user setting management (password protected administrative function) and dose data read-out/analysis. It shows similar dose history views as the Base Station, but "off-line" via the PC and with more details, as long as the PDM is in the cradle. As the cradle takes over battery power supply, it's also an easy way to verify battery status if the PDM seems to have empty battery. (like no connection with Base Station)

Specifications of the Base Station:

- Dimensions: 30 x 25 x 6 cm (W x H x D)
- Weight: 1.45 kg
- Display: 10.4 " touch screen, 640 x 480 pixels
- Memory: 512 Mb
- Storage: all dose-rate/sec and accumulated dose/hr that are received from PDM's in range. The memory size accommodates f.i.250 PDM's with 50 hours dose rate history each.
- Power Supply: via adapter, 90-264 VAC, 24 W
- Communication: wireless radio communication with PDM's (see PDM spec)
Ethernet 10/100 Mbits/s port for the Dose Manager connection

42	Rad Shield w/ Arm (Contoured) 61X76	2
	Contoured Rad Shield with Arm rest. 61X76	
43	MOBILE RADIATION SHIELD	1
	Mobile radiation protection shield on 4 casters with adjustable clear acrylic window. Base is 78cm wide and 107cm high and has 1 lead equivalency. Window is 70cm wide and is adjustable from 115 to 190cm high and has 0.5mm lead equivalency.	
44	PIVOTING TABLE-MOUNTED RADIATION SHIELD	1
	Table-mounted radiation shield for additional protection of physician and staff against scatter radiation. The shield consists of two protective parts: a lower shield and an upper shield. The shield is specially designed for use with the AD5 patient table.	
	The table mounted radiation shield provides the following features:	
	<ul style="list-style-type: none"> • Mounting to either the right or left table accessory rails; • Pivoting into the required working position; • Pivoting into the parking underneath the tabletop facilitating patient preparation; • The upper shield can be positioned upright providing optimal protection or can be folded down for free access to the patient. 	
	The table mounted radiation shield includes:	
	<ul style="list-style-type: none"> • Lower shield measuring 70 cm high 80 cm wide 0.5 mm Pb equivalence; • Upper shield measuring 40 cm high 50 cm wide 0.5 mm Pb equivalence; • Mounting clamp; 	
	Docking device for wall mounting.	
45	Cable Spooler	1
46	M LED 3MC Light	1
	MAVIG M3 MC LED - Multi Color / power Supply Included Includes Portegra2 Ext Spring Arm 75/90cm	
47	Mark 7 Arterion, Table Mount	1
	<p>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.</p> <p>The clear and intuitive user interface guides you through proper set-up, and highlights the information you need to perform safe procedures.</p> <p>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.</p>	
	<p>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.</p> <p>The table mount injector solution ensures the contrast injector is conveniently placed and always</p>	

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

48	CORE™ Printer Option	1
	CORE Printer Option	
49	Ceiling Track w/Column & Handle Ext	2
	Mavig 2.5m Ceiling Track with Ceiling trolley, 360 degree column, and brake handle extension.	
50	Volcano CORE IVUS - Cardiac Bundle	1
	CORE Precision Guided Therapy System	

CORE CPU, Operator's Manual, Power Transformer, Cable Pre-Install Kit, Connection Box, two (2) Standard Controller and one (1) bedrail mount, 19"NEC Monitor Kit, Phased Array PIM Body, FFR functionality, DICOM Network Connection, ChromaFlo Functionality.

-Includes VH IVUS End User License Agreement

The customer agrees that use of the VH IVUS Software is subject to the terms of the End User License Agreement. A copy of the End User License Agreement is also available from your VOLCANO representative or online at www.volcanocorp.com/products/pdf-files/software-support-vh-ivus.pdf

-Includes Three (3) Year IVUS Software Support Agreement

This signed Agreement provides for the purchase of the IVUS Software Support Agreement (SSA), which provides for unspecified IVUS software revisions released during for a three (3) year term (should any be commercially released) at no additional cost. In the absence of an SSA, future software revision releases will be made available at additional cost to be determined upon commercial availability.

iFR Hyperemia-Free Lesion Assessment Modality CORE Interface, Operator's Manual. Customer agrees that use of the iFR Application Software License Application with interface to CORE is subject to the terms of the End User License Agreement. A copy of the End User License Agreement is also available from your VOLCANO representative or online at www.volcanocorp.com

CORE Control Pad Option

Bedside touchscreen controller offering system control from the sterile field

- | | | |
|-----------|--|----------|
| 51 | 46" 1080p LED Wall Display | 1 |
| | 46" 1080p LED Wall Display & Mounting Kit - 46" High Definition LCD with a wide screen aspect ratio with Wall Mount Bracket and EasyLink Wall Display Kit. | |
| 52 | 55" 1080p LED Wall Display | 1 |
| | 55" 1080p LED Wall Display & Mounting Kit - 55" High Definition LCD with a wide screen aspect ratio with Wall Mount Bracket and EasyLink Wall Display Kit. | |
| 53 | Personal Wireless
Bidirectional Audio | 1 |
| | Personal Wireless Bidirectional Audio with One Wireless Microphone Set - Provides bidirectional audio communication for one user with one wireless microphone set. | |
| 54 | Add'l Wireless Microphone Set
for Personal Audio | 1 |
| | Additional Wireless Microphone Set for Personal Bidirectional Audio - Adds a second user to Personal Wireless Bidirectional Audio Option plus additional wireless microphone set. | |
| 55 | DVI fiber transmitter / receiver
link | 3 |
| | DVI over fiber transmitter / receiver link - Fiber optic transmitter / receiver plus fiber cabling for galvanic isolation. May be sold with any Philips In-Room Routing and Control package. Valid for inbound or outbound link. | |
| 56 | ISM Flex 12 Solution | 1 |
| | The ISM Flex 12 Solution is comprised of the following items: | |
| | EasyLink Router & Control System featuring EasyPort Universal Connection and KVM Control Command Center for the Digital Operating Room. This is the core technology for EasySuite offering touchscreen control that securely directs digital high definition (HD) surgical video throughout the operating room. The EasyLink router controls all video sources, displays, music, surgical devices, computing, recording, lights, music, audio communications from a single ergonomic 22" touchscreen (included). | |
| | Rack, Free Standing AV Rack, Putty Standard AV Rack Configuration uses a free standing 24RU AV rack (putty color) with a finished enclosure measuring 55.5"Hx 22"Wx 26"D. | |

Image Capture and Image Capture VaultStream Includes the ability to capture images from the procedure, store in the central archive and review on physician PC or via EasyView iPad app for patient/family consultation.

Twelve EasyLink Input Adapter EasyLink Adapter - S-Video Input Pack or HD-SDI or DVI (any combination up to 12 per room in base package). One additional ELA may be ordered as an option.

Eight EasyPort Plate Kit Pack of EasyPort video input plates. 8 plates included in package, capable of handling up to 12 ports. Specific configuration (single or dual port) specified as part of room design.

Twelve EasyLink Adapter - DVI Output EasyLink Adapter - DVI Output Pack to deliver DVI video signals to displays and system output devices. 12 included in package.

Soft KM PACS & Charting w/KB & Mouse Provides Charting Nurse Station computer control capability to the routing and control system. Includes ability to control 4 independent computers using a single keyboard and mouse. Switching control is achieved via the system touch panel.

Advanced Audio Communication System with Hands Free Telephony Advanced audio uses an echo cancelling audio communication system with the EasySuite touchscreen to call or receive a telephone call. The hands-free system utilizes O.R. loudspeakers and 1 boom mounted microphones with no handset required.

MP3 Audio and Charging Interface Universal MP3 personal audio connections including USB charging capability and audio connection to Advanced Audio Communication System

Speaker Upgrade for AAC (adds 2 additional speakers for Exam Room) Upgrade adds two recessed ceiling mounted speakers to the Standard Audio System, or Advanced Audio System, for a total of four speakers per Operating Room.

PTT Control Room Communication System with Control Room Loudspeakers Push to talk intercom microphone system for control room plus two recessed ceiling mounted speakers for Control Room.

Ambient Room Lighting Control Enables touch panel control of room lights using customer provided lighting controller. Functions include on/off and ability to select multiple lighting presets.

EasySuite Patient Greeting System (PGS) Patient Greeting System (PGS) sets a friendly mood by automatically playing ambient classical music and configures all displays to play a soothing video while the patient enters the operating room.

EasySuite Checklist Manager Checklist Manager complies with the surgical safety checklist protocol during the timeout section of the case.

Integrated EasySuite OR Installation Integrated EasySuite OR Installation, Design Services & Project Management

Comprehensive Training Comprehensive Training Included. 1 day for each system ordered.

58

2

59

5

60

32

61

1

The EP Cockpit part trains the engineer to a technical and application level which will enable the engineer to do room preparation, mechanical and electrical installation, configuration and

connectivity on the EP Cockpit parts of an Allura Xper FD system, following the System Manual Installation and Setting To Work.

The EP Navigator part trains the engineer to a technical and application level which will enable the engineer to do the Installation and the Setting To Work activities between the Allura Xper FD Cathlab, EP Navigator workstation and an Xcelera, following the Setting To Work.

The engineer will be able to connect an Allura Xper FD modality to the EP navigator who can retrieve the CT images of the patient from the Xcelera or 3D-ATG images from the Allura. The EP Navigator will match these reconstructed 3D images with the fluoroscopy images coming from the Cathlab.

The FlexVision part will train the engineer to a technical level which will enable the engineer to do the Installation, Setting To Work and Corrective Maintenance of the FlexVision option on an Allura Xper FD system according the Service Manuals.

All knowledge and skills for the configuration, connectivity and interoperability functions are practiced during the lab sessions.

PREREQUISITES:
XD3971 or XD9065

COURSE OBJECTIVES:

During this course the field service engineer will be provided with the needed competencies to install an Allura Xper EP Cockpit lab with an EP Navigator workstation & FlexVision 56" monitor.

The engineer will learn the following knowledge and skills:

- Hardware Installation of the EP Navigator components
- Installation of the EP Navigator Operating Software and Application Software
- Configuration of an EP Navigator towards an Xcelera for query and import
- Configuration of an Xcelera towards an EP Navigator for query and send
- Configuration of a Real Time Output (RTO) link of a Cathlab towards the EP Navigator
- Configuration of the Control network of a Cathlab towards the EP Navigator
- Execution of the DICOM verification tests for Query and Import
- Configuration of the Xper settings of the Cathlab for a correct automatic EP workflow with the Cathlab in application mode
- Testing of the total workflow with all systems in Application mode
- Mechanical /Electrical Installation Monitor Ceiling Suspension with FlexVision 56" monitor
- Mechanical /Electrical Installation B-Cabinet
- Configuration of the FlexVision 56" monitor
- Adjustments of the FlexVision 56" monitor
- Corrective Maintenance issues of the FlexVision 56" monitor

PHILIPS PROPRIETARY MATERIALS SUCH AS DIAGNOSTIC SOFTWARE AND SERVICE DOCUMENTATION ARE NOT INCLUDED IN THE TRAINING AND WILL NOT BE AVAILABLE FOR USE OUTSIDE OF THE TRAINING ENVIRONMENT. THE TRAINEE MUST RETURN ALL PROPRIETARY MATERIALS RECEIVED DURING THE TRAINING AT THE END OF THE TRAINING. CUSTOMER ACKNOWLEDGES AND AGREES THAT NEITHER CUSTOMER NOR TRAINEE WILL RECEIVE A LICENSE TO SUCH PROPRIETARY MATERIALS AND THAT THE TRAINEE MAY NOT BE ABLE TO FULLY UTILIZE THE TRAINING WITHOUT THE USE OF SUCH PROPRIETARY MATERIALS. (CERTAIN LICENSES MAY BE OBTAINED THROUGH PURCHASE OF AN ALLIANCE CO; OP AGREEMENT.) Course dates and location to be finalized

by Philips. Philips shall attempt to accommodate Customer requested dates and training location. The price quoted includes course tuition. Travel and living expenses are not included, but may be purchased separately through Philips.

IMPORTANT Notes Regarding Admission to Philips Customer Engineer Training Courses:

1. Trainee must meet all prerequisites
2. Course expires one (1) year from equipment installation date (or purchase date if sold separately)
3. Customer must sign Philips Nondisclosure statement
4. Trainee must sign Philips Nondisclosure statement
5. Customer must sign Philips terms and conditions of training

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**XD3970ALLURAFD7.6PART1C
TC9**

1

Course Number: XD3970

System Codes: 722010, 722011, 722012, 722013

Course Title: Allura Xper Rel 7.6 Part 1

Course Length: 9 days (exclude Saturday, Sunday, and Philips holiday)

Delivery Method(s): Instructor-Led

Modality: iXR

Location: PHC, SLC, CTC

Target Audience: Service Engineers.

DESCRIPTION:

Part 1 trains the Customer Support engineer to a technical level which will enable him/her to perform Planned Maintenance (PM) and basic Corrective Maintenance (CM) on Allura Xper systems, according to the Customer Support philosophy. He / She will also be able to assist during a system installation.

Part 1 can be followed up by part 2, intended for dedicated Cardio Vascular modality Engineers.

Part 2 focuses on setting to work (configuration) and extended Corrective Maintenance.

The following Allura Xper systems are covered:

FD10 release 7.6

FD10/10 release 7.6

FD20 release 7.6

FD20/10 release 7.6

FD20/20 release 7.6

PREREQUISITES:

CS9020 BASIC NETWORKING

XC3002 X-RAY SYSTEMS BASIC PART 2

COURSE OBJECTIVES:

The engineer will learn how to:

- Operate the system, as far as required to perform service tasks.
- Make use of the service documentation.
- Make use of basic functionality of the service tools.
- Perform Planned Maintenance:
 - Safety checks
 - Performance checks
 - Adjustments(Not included: Mechanical checks)
- Create a backup of the system.
- Perform a restore of the system.
- Perform basic CM with help of the service documentation and service tools.
 - Faultfinding using the System Manual Corrective Maintenance.
 - Focus on replacement of parts with a high exchange rate.

- Retrieve the log file from the system to escalate a problem.
- Customize positions for Automatic Position Control in the EPX-database.

MAJOR TOPICS:

Introduction Allura Xper systems

Operating

Service documentation

Service tools

Planned Maintenance

Corrective Maintenance

System Architecture

X-ray generation

Geometry

Operator controls

Power supply

Imaging

System control

Radiation safety

Image quality

Customization

Software

* PHILIPS PROPRIETARY MATERIALS SUCH AS DIAGNOSTIC SOFTWARE AND SERVICE DOCUMENTATION ARE NOT INCLUDED IN THE TRAINING AND WILL NOT BE AVAILABLE FOR USE OUTSIDE OF THE TRAINING ENVIRONMENT. THE TRAINEE MUST RETURN ALL PROPRIETARY MATERIALS RECEIVED DURING THE TRAINING AT THE END OF THE TRAINING. CUSTOMER ACKNOWLEDGES AND AGREES THAT NEITHER CUSTOMER NOR TRAINEE WILL RECEIVE A LICENSE TO SUCH PROPRIETARY MATERIALS AND THAT THE TRAINEE MAY NOT BE ABLE TO FULLY UTILIZE THE TRAINING WITHOUT THE USE OF SUCH PROPRIETARY MATERIALS. (CERTAIN LICENSES MAY BE OBTAINED THROUGH PURCHASE OF AN ALLIANCE CO; OP AGREEMENT.) Course dates and location to be finalized by Philips. Philips shall attempt to accommodate Customer requested dates and training location. The price quoted includes course tuition. Travel and living expenses are not included, but may be purchased separately through Philips.

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4. Trainee must sign Philips Nondisclosure statement
5. Customer must sign Philips terms and conditions of training

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XD3974ALLURAXPERREL7.6P ART2CTC9

1

Course Number: XD3974

System Codes: 722010, 722011, 722012, 722013

Course Title: Allura Xper Rel 7.6 Part 2

Course Length: 9 days

Delivery Method(s): Instructor-Led

Modality: iXR

Location: PHC, SLC

Target Audience: Service Engineers.

DESCRIPTION:

This course is a follow up on the Allura Xper Part 1 course and is intended for modality Engineers that specialize in Cardio Vascular.

3 months Field experience on Allura Xper systems is strongly recommended before attending this part 2 course, this means the engineer has done some installation, pm- and cm visits.

In part 2 the customer support engineer is trained to a technical level which will enable him/her to perform setting to work and extended corrective maintenance on Allura Xper systems, according the customer support philosophy.

Not covered are the Mechanical Installation and Cabling of the Allura Xper System.
These topics are covered in the e-learning: Allura Xper Mechanical Installation.

The following Allura Xper systems are covered:

FD10 release 7.6

FD10/10 release 7.6

FD20 release 7.6

FD20/10 release 7.6

FD20/20 release 7.6

PREREQUISITES:

- XD3866 or XD3966 or XD3970

COURSE OBJECTIVES:

For Allura Xper systems, the engineer will learn how to:

Perform the setting to work, including:

Setting to work of Dicom Store and Storage Commit from Allura towards an Xcelera PACS as well as Setting To Work of the CWIS option towards an Xcelera and/or Hemodynamic system Xper Flex Cardio.

Customizing of common parameters of the Xper database.

Distinguish technical problems from incorrect operating.

Perform extended corrective maintenance; with help of analytical trouble shooting, service documentation and service tools.

Perform a Dicom traffic capture file, with help of the DVTK program (Dicom Network Analyzer), as part of the connectivity Fault Isolation Procedure for analyzing and if needed sending to helpdesk
Image quality faultfinding using lower level IQ measurements.

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**XD3007XRaySystemsBasicPart
2CTC5D**

1

Course Number: XD3007

Course Title: X-Ray Systems, Basic part 2

Course Length: 5 days

Delivery Method(s): ILT

Modality: DXRLocation: Best

Target Audience: Field Service Engineers

System codes:

DESCRIPTION:

The ILT provides fundamental information on the generation and application of X-rays for diagnostic imaging.

PREREQUISITES:

English Language,
XD9115, X-Ray Systems, Basic part 1

COURSE OBJECTIVES:

After successful completion of this eLearning, the learner will have knowledge on the basics of:

- Medical application
- The physics of X-rays
- Radiation protection
- The building blocks of X-ray systems
- X-ray tubes
- Generators
- Image performance parameters
- The documentation systems of X-ray systems
- Planned Maintenance
- Installation

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IMPORTANT Notes Regarding Admission to Philips Customer Engineer Training Courses:

1. Trainee must meet all prerequisites
2. Course expires one (1) year from equipment installation date (or purchase date if sold separately)
3. Customer must sign Philips Nondisclosure statement
4. Trainee must sign Philips Nondisclosure statement
5. Customer must sign Philips terms and conditions of training

Allura Xper / Clarity release 8.2

Course Number: XD8982

System Codes: 722-026, 722-027, 722-028, 722-029, 722-033, 722-034, 722-035, 722-036, 722-038, 722-039

Course Title: Allura Xper / Clarity release 8.2

Course Length: 5 days

Delivery Method(s): ILT

Modality: iXR-CV

Location: PHC and CTC

Target Audience: CS Field Service Engineers

DESCRIPTION:

This course will provide information on and in insights in the differences between Allura Xper release 8.1 and Allura Xper / Clarity release 8.2.

PREREQUISITES:

XD3970, Allura Xper Rel 7.6 part 1(Or history courses XD3966 & XD9065 or XD3875 & XD9065);

Field experience;

XD9906, Allura Xper update to R8.1;

FC9021 Cat Tool.

COURSE OBJECTIVES:

Upon completion of this course and using the appropriate service manuals, the FSE can:

- Identify differences between the 8.1 release and the 8.2 release.
- Recognize new system parts.

- Certeray Generator

- motion control Clea-stand

- FD20 and FD15 detector

- AD7XT and AD7XNT table

- Power Supply gPDU

- Cabinet layout and cable routing

- Identify and sequence the steps to installing an 8.2 release.
- Identify the new service documentation structure
- Identify the Diagnostic CM procedures.

* PHILIPS PROPRIETARY MATERIALS SUCH AS DIAGNOSTIC SOFTWARE AND SERVICE DOCUMENTATION ARE NOT INCLUDED IN THE TRAINING AND WILL NOT BE AVAILABLE FOR USE OUTSIDE OF THE TRAINING ENVIRONMENT. THE TRAINEE MUST RETURN ALL

PROPRIETARY MATERIALS RECEIVED DURING THE TRAINING AT THE END OF THE TRAINING. CUSTOMER ACKNOWLEDGES AND AGREES THAT NEITHER CUSTOMER NOR TRAINEE WILL RECEIVE A LICENSE TO SUCH PROPRIETARY MATERIALS AND THAT THE TRAINEE MAY NOT BE ABLE TO FULLY UTILIZE THE TRAINING WITHOUT THE USE OF SUCH PROPRIETARY MATERIALS. (CERTAIN LICENSES MAY BE OBTAINED THROUGH PURCHASE OF SUPPORT OR ASSIST AGREEMENT.) Course dates and location to be finalized by Philips. Philips shall attempt to accommodate Customer requested dates and training location. The price quoted includes course tuition. Travel and living expenses are not included, but may be purchased separately through Philips.

IMPORTANT Notes Regarding Admission to Philips Customer Engineer Training Courses:

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2. Course expires one (1) year from equipment installation date (or purchase date if sold separately)
3. Customer must sign Philips Nondisclosure statement
4. Trainee must sign Philips Nondisclosure statement
5. Customer must sign Philips terms and conditions of training

The Equipment Rack for EP cockpit allows users of the Philips Allura Xper[Clarity] system to organize all the equipment used in an EP Lab on one moveable rack and removes cable clutter through a cable conduit. This provides a much "cleaner" organized look for the busy EP Lab. The ceiling-mounted Equipment Rack, located in the Exam Room, can support 3rd party equipment. Cabling for this equipment is guided up through the ceiling mounted suspension. It can be moved by swiveling the ceiling mounted boom. The Equipment Rack can be positioned within a circular range of 1.6 meters.

The Equipment Rack consists of:

- 5 shelves and 1 drawer with flexible mounting position and can support 150kg of equipment weight.
- An infusion extension rod
- An extension arm with a standard VESA mounting plate, on which different types of equipment can be mounted
- A Wall Connection Box (1 of the standard EP cockpit Wall Connection Boxes) with Power (230V, 50Hz), Grounding, Network (RJ45), Keyboard/mouse (USB) and Video (DVI) connections
- 10 country-specific power connectors
- Note: For USA/Canada 16 country specific power connectors
- 4 Ethernet network connectors
- Ergonomically operating handles with electric brakes
- Standard gas outlets for O2, NO2, and Vacuum

Notes:

- Life-supporting equipment cannot be connected to the Equipment Rack.
- Medical equipment with dedicated keyboards or displays should not be connected without consent of the manufacturer. Please contact your 3rd party equipment vendor for information and clearance.
- Please contact 3rd party equipment vendor for information and clearance in case of cable routing through equipment rack.
- The Wall Connection Box can be used to connect 3rd party equipment that complies with the following requirements:
- Qualified medical electrical equipment [IEC 60601-1]

- IEC 950 only if connected to an EP cockpit Wall Connection Box mains (230V) connection in the Control Room or otherwise isolated from hospital mains according IEC60601-1.
- Connected to the same earth as the Philips Protective Conductor Bar (PPCB).
- Can be operated with a standard AT 101-key US English keyboard connected through a USB connection.
- Provide video-output that matches the display range of the Color monitor that is used for display. Standard VESA video formats up to 1920x1200 are supported

67 Equipment rack Predelivery set 1

Pre-delivery for Equipment Rack.

68 Electrical Accessory kit OSC 1

69 Pre-Install Bracket 1

70 Pneumatic Regulator 1

71 Riser Oxygen DISS connection 1

72 Riser Vacuum DISS connection 2

Refers to the type of gas connection and gas needed for the Equipment rack. This is a DISS connector for Vacuum suction.

73 Riser MedAir DISS connection 1

Refers to the type of gas connection and gas needed for the Equipment rack. This is a DISS connector for Medical Air.

74 25 kVA Fluoro only UPS - UPC 1

25 kVA Fluoroscopy Only Solution, Release 8.2 Ready.
This system includes the following components:

25 kVA UPS

- 480v AC 3 phase input; 480v AC 3 phase output
- Fully rated Static Bypass Switch
- Input Isolation Transformer; Output AutoTransformer
- Dimensions: 36.3D x 20"W x 59.8H"
- Weight: 998 lbs (approximate).

Universal Power Controller (UPC)

- Combines the Battery Cabinet and Universal Transfer Switch Functions.
- Provides 12.5 Minutes of runtime at full load on battery
- Provides all interconnections to fully integrate into CV Lab.
- All previous 480V system functionality retained from previous separate component design.
- All connections are via external terminal blocks, rear access.

- All breakers are externally accessible from front.
- Isolated compartments for Battery and Switch sections.
- Fully ETL tested and certified UL, cUL and CSA Compliant.
- Dimensions: 31.5"D x 17.2"W x 59.8"H
- Weight: 1020 lbs (approximate).

DC Power Supply

- Artesyn/Emerson Part Number 73610129
- Single Unit Included for Mono Plane Systems
- Dimensions: 13.9" L x 6" W x 3" H
- Weight: 40 lbs (approximate).

Wiring Harness

- Complete Harness connecting UPC and UPS to MA Cabinet, includes control and Auxiliary connections and wire sizes per schematics. 50ft UPC to MA and 15ft UPC to UPS.
- Shipping Dimensions: Approx 31"L x 28"W x 22"D
- Weight: 140 lbs (approximate).

R8.2.1 UPS Control Kit

- Knife Switch rated 100A at 600V
- 120V rated Aux Switch Contacts
- Wall Mounted NEMA Enclosure
- Dimensions: 20"Hx 15"W x 8"D
- Weight: 25lbs

Included in UPC:

- Contactor MC3

Line #	Part #	Description	Qty
1		Xper Flex Cardio Nurse Station	1
		<p>The Nurse Station is a computer workstation that can be installed within the Cath Lab suite and offers an additional location from which to enter medication and nurses' notes data during procedures and sample pressures and other physiologic data. Nurse Station is also capable of controlling Xper Flex Cardio 2010. The Nurse Station communicates with a central database server for accessing and storing patient case procedure information.</p> <p>Features:</p> <ul style="list-style-type: none"> -Remote workstation for procedure documentation -Remote control of the Xper Flex Cardio 2010 or 2020 -Remote recording of hemodynamic samples -Input conscious sedation data -Point of care inventory management via documentation or manufacturer barcode (optional via Inventory) <p>Minimum Hardware included:</p> <ul style="list-style-type: none"> -XDS Workstation -19" LCD Display -Keyboard -Mouse -Patient cable kit -Barcode reader <p>System Software included:</p> <ul style="list-style-type: none"> -Xper Information Management Hemo Control software for Workstation CPU -Microsoft Windows 7 -Symantec pcAnywhere -Microsoft SQL Express Edition <p>Requires:</p> <ul style="list-style-type: none"> -Xper IM Data Center SW R1.5. Note: Existing networks to which a Flex Cardio is to be added will be upgraded to R1.5 at time of room installation -XDS Wall Mount OR Rolling Stand 	
2		Xper Flex Cardio Flex Cardio 2010	1
		<ul style="list-style-type: none"> - Complete, pre-configured FC2010, geared for quick system repairs - Device only (does not include installation cables or patient cables) <p>Monitoring Parameters:</p> <ul style="list-style-type: none"> - Four (4) invasive pressure channels - 12 Lead ECG - Respirations - Body Temp - NIBP - SPO2 - Integrated Cardiac Outputs 	

Xper Flex Cardio Control Room configuration is a physiomonitoring/hemodynamic system that is optimized for the cath lab environment. The system allows for monitoring the patient's vital signs as well as allows for hemodynamic measurements required during interventional procedures. This Control Room configuration consists of a signal acquisition unit that is installed within the procedure room and a computer workstation in the x-ray control room. This configuration is typically used within the cath lab, hybrid OR and multi-purpose labs where cardiac monitoring is required. User logins allow for networking to a central database server for archival of case procedure information. The system outputs the monitored signals to a boom display within the procedure room, while dual LCDs displays connected to the control room workstation can be used for all of the hemodynamic and information management functionality.

Software Features:

- Physiomonitoring, manual or automated entry of patient information in case details, sampling of waveforms, charting, hemodynamics
- Non-clinical functionality available via Xper Information Management modules loaded on the control room workstation

Xper Information Management modules included:

- Hemodynamic control software
- Charting for case procedure documentation
- Hemodynamic calculations
- Vitals capture
- Scheduler

Optional Features:

- FFR Measurement for Volcano or St. Jude
- End Tidal CO₂ (Side Stream and/or Main Stream)
- 16 Lead ECG
- ECG Analysis using Philips DXL Algorithm

Optional Modules:

- Xper IM Documentation Workflow Modules
- Xper IM Registries
- Xper IM Patient Status Viewer

Minimum Hardware included:

- Flex Cardio device (Model FC2010)
- Workstation
- Dual LCD Displays
- Keyboard
- Mouse
- Patient cable kit

Minimum Software included:

- Microsoft Windows 7 or greater
- Current version of Xper IM software for workstation
- PC Anywhere v12.5 or greater
- McAfee Antivirus

Monitoring functionality included:

- NIBP
-

- Respiration
- Temperature
- 12-lead ECG
- SpO2
- Cardiac output (Thermodilution)
- Invasive pressures (4 channels)

Requires purchase of:

- Xper IM Data Center SW
- Table Mount
- 4:3 LCD HQ Display

NOTE:

- Pressure transducers, or adapter cables, are not included.
 - Contact: Fogg System Company
- USA: 1-800-525-0292
<http://www.foggssystem.com/>

- | | | |
|---|--------------------------|----------|
| 4 | Side Stream ETCO2 | 1 |
| <p>Incorporates Side Stream End Tidal CO2 monitoring capabilities to Xper Flex Cardio devices via external Philips Sidestream cable (M2741A)</p> <p>- Monitoring accomplished via nasal canula.</p> | | |

Include:

- One box (10 each) disposable Adult CO2/O2 Nasal Canulas (M2750A)
- One box (10 each) disposable Pediatric CO2/O2 Nasal Canulas (M2751A)

- | | | |
|---|--------------------------------|----------|
| 5 | FFR Measurement Volcano | 1 |
| <p>The FFR Measurement for Volcano option enables a Volcano SmartMap(tm) device to be connected to Xper Flex Cardio physiomonitring system for integrated Fractional Flow Measurements.</p> <p>Features</p> <ul style="list-style-type: none"> -Compatibility with Volcano SmartMapTM device allowing use of Volcano guide wires for monitoring pressure waveforms -Ability to record a sample of the pressure waveform -Real time, dynamic FFR measurement and capture -Retrospective review of FFR pressure waveform <p>Requires</p> <ul style="list-style-type: none"> -Model 6500 SmartMap Pressure Instrument (not included) <p>*Customer is responsible for purchasing the SmartMap Model 6500 device and compatible guide wires directly from Volcano Corporation</p> | | |

- | | | |
|---|---|----------|
| 6 | Total Number Xper Concurrent User Licenses | 3 |
| <p>The quantity shown for this item indicates the TOTAL number of Concurrent Users customer would have after purchasing additional licenses offered within this proposal.</p> <p>This total is derived by taking into account any existing concurrent users licenses the customer currently owns, and adding that number to the quantity being offered under a separate line item. For this reason the TOTAL number may be more than the quantity offered herein.</p> | | |

- | | | |
|---|--|----------|
| 7 | Xper IM Concurrent User License | 2 |
|---|--|----------|

Xper Concurrent User licenses provide floating access to interact with a single server. While the quantity of clients is uncontrolled, the total number of concurrent user licenses available determines the maximum amount of simultaneous users on the network at any moment in time.

- Allows access to all purchased Xper Information Management workflow modules at networked workstations
- Hospital to provide network card(s), hub ports, cable to node(s), and implement installation of hardware

Requires:

- Client Workstation HW
- Data Center SW

8 Xper IM Workspace 1

Hardware for use with concurrent user licenses and Patient Status Viewer software.

Minimum Workstation Hardware Included:

- Main Board
- 3.0 GHz or greater hyper-threading processor
- 2 GB RAM
- 80 GB or greater hard drive
- DVD-ROM drive reader
- Video – 1280 x 1024 res, 24/32 bit color (optional Dual Head DVI)
- 10/100/1000 MB network adapter (may have multiple)
- Mouse
- Keyboard

NOTE: Xper IM Concurrent User Licenses and/or Patient Status Viewer license must be purchased separately.

9 GCX Rolling Stand 1

For mounting of VESA Compatible Flat Panel displays.

Includes:

- Rolling stand
- Keyboard / Mouse support arm
- CPU mounting bracket
- Flat Panel display mounting base
- Storage basket
- Support arm for Flex Cardio device

Notes:

*This roll stand does not support mounting of dual displays.

*Customer purchasing Xper Flex Cardio Bedside Solution will also need to purchase the Xper GCX Articulating Arm for mounting of the FC2020 device.

10 4:3 LCD HQ Display (19 inch) 1

19" Medical Grade LCD Color Display (1280 x 1024 resolution) for mounting on suspension boom in procedure room, or for use with client workstations

- Includes VGA Cable (To be pulled / installed by customer). Cable not included with Boom monitor if purchased with a hemodynamic system, as the cable is included with that product.

11 UPS - Medical Grade 1

Medical grade UPS for use with Xper Information Management Flex Cardio servers

12	16:9 LCD Display (22 inch)	1
	22" LCD Color Display (resolution 800 x 600 min. to 1680 x 1050 max.) Not for use as a boom monitor or for imaging systems. May be used for client workstations.	
13	Xper Flex Cardio Table Mount	1
	This Xper Flex Cardio Table Mount is a customized mounting system and is required to mount FC2010 to x-ray table. The mount includes cable management to minimize clutter of cables connected to the FC2010 device.	
	*This wall mount is optimized for the Philips Allura X-ray table, but could be used for x-ray tables from other manufacturers.	
14	Customer prov. Data Center and/or Broker Server HW	1
	Customer to provide Data Center Server hardware that meets or exceeds the following minimum specifications:	
	<ul style="list-style-type: none"> -File Server - Main Board - Dual Core 1.6 GHz or greater processor - 4 GB RAM - Hard Disk (500 GB capacity, RAID possible) - DVD-ROM drive - Video – 1280 x 1024 res, 16 bit color Min - 10/100/1000 Network Adapter (may have multiple) -Microsoft Windows Server Operating System -Microsoft SQL Server Software -Symantec pcAnywhere -Rack in which to place Server, monitor, keyboard, mouse and UPS 	
	Alternatively, customer to provide higher capacity Data Center server hardware, recommended for use when there is a need for either higher database storage capacity, or to allow multiple facilities to share a single data center, to meet or exceed the following specifications:	
	<ul style="list-style-type: none"> - File Server - Main Board - Dual Quad Core 3.16 GHz or greater processor - 32 GB RAM - RAID 5 or greater - DVD-ROM Drive - 4 TB Storage Space - Video – 1280 x 1024 res, 24/32 bit color Min - 10/100/1000 Network Adapter (2) -Microsoft Windows Server Operating System -Microsoft SQL Server Software -Symantec pcAnywhere -Rack in which to place Server, monitor, keyboard, mouse and UPS 	
	NOTE:	
	If this hardware is to support more than one facility, each facility must have a 1000mb uplink between the facility and the Server.	
	Customer to provide the Interface Server hardware, to meet or exceed the following minimum specifications:	

- File Server
- Main Board
- Dual Core 1.6 GHz or greater processor
- 4 GB RAM
- RAID 5 array (500 GB capacity)
- CD-ROM drive
- Video – 1280 x 1024 res, 24/32 bit color Min
- 10/100/1000 Network Adapter (2)
- Microsoft Windows Server Operating System
- Microsoft SQL Server Software
- Symantec pcAnywhere
- Rack in which to place Server, monitor, keyboard, mouse and UPS

15	Customer to provide rack enclosure	1
16	Installation Cable Kit Control Room Provides all installation cables required for normal installation, Flex Cardio Control Room.	1
17	Xper IM IfU (English) Manual English Instructions for Use in hard copy format.	1
18	OnSite Clinical Training, 2 days Provides one Clinical Applications Specialist on-site for two days (minimum 8 hours/day) Training is valid for one year from the purchase date. Any unused training will expire after this time.	2
19	OnSite Clinical Training, Additional day Provides one Clinical Applications Specialist on-site for one additional day (minimum 8 hours/day). Training is valid for one year from the purchase date. Any unused training will expire after this time.	1
20	Workflow Consulting Services This consulting service is designed to analyze and document a customer's current departmental workflow, and then identify ways to optimize that workflow through the use of Xper Information Management. Whether replacing an existing cath lab hemodynamic and information system, upgrading from a legacy system or moving from paper-based processes to electronic documentation careful analysis and preparation for the new environment are critical to a successful implementation. This service is vital to understanding and planning for these effects.	1
21	Xper IM Clinical Super User ILT Course Xper Information Management Clinical Super User ILT Course	1

Overview:

This course provides the learner with the knowledge and skills required for a successful Xper IM implementation by the clinical Super User. This training is designed for new Xper IM clinical Super Users (RN's, RCIS's, RT's, or CVT's) who are unfamiliar with the Xper Information Management application, the Flex Cardio Hemodynamic system, and implementation process. The course includes a combination of eLearning modules and Instructor Lead Training (ILT).

- The interactive, eLearning modules will focus on key functions and transactions in the system

and will be made available to the learner prior to the ILT portion of the training and are a prerequisite. These modules will provide a combination of foundational knowledge and interactive system simulations. Each module will include knowledge checks and a final assessment to ensure that the participant understands the concepts and how to implement them. Finally, participants will be able to revisit these modules as part of ongoing performance support.

- The ILT Class will focus on providing the learner with a simulated “Day-in-the-Life” experience with Xper IM. The class is taught using a combination of demonstrations and hands on experience. This intensive face-to-face portion of the course will take place at a designated Philips learning facility.

Upon completion of the Xper IM Clinical Super User Training, Clinical Super Users should be able to implement the skills learned to customize their databases for their facilities' workflows, be able to utilize the Flex Cardio monitoring system, and train additional staff to use the application to perform a variety of procedures.

The price of this training also includes air travel, ground transportation, hotel accommodations, lunch, and a daily allowance for breakfast and/or dinner at the hotel.

Features:

Individuals who complete the prerequisite eLearning modules and attend the Instructor-led portion of the training will be able to:

- Describe the function of each of the components comprising the Xper IM network
- Identify how to meet the demands of the hospital's rigid user security requirements by utilizing the security features of the Xper IM Hemodynamic System
- Properly utilize the system to monitor any procedure type by utilizing the Flex Cardio Monitoring System
- Customize the system's default menus to ensure proper patient documentation
- Customize the default system tables to meet the needs of the facility
- Customize and maintain inventory through the Xper IM application.
- Perform the diverse types of cases from beginning to end and incorporate all aspects of the case into an electronic medical record.
- Document data for submission to the ACC4 CathPCI NCDR

Recommended Attendees:

- Xper Information Management Clinical Super Users (RN's, RCIS's, RT's, or CVT's) - Not for IT.
- The prospective student should have knowledge of clinical procedures and facility workflow, basic PC knowledge of Windows OS (copy, paste, find files, keyboard and mouse usage).
- Students should have the authority to make decisions regarding database changes for their facilities.

Engagement Deliverables:

- Successful completion of Xper Information Clinical Super User prerequisite eLearning module is required prior to attending this course.
- Completion of the Instructor Lead portion of the training, covering the features listed above with the addition of a final exam.

Engagement Completion Criteria:

- Attendance of one person at Xper Information Management Clinical Super User Instructor-led Training Course
- The trainee has completed the prerequisite eLearning modules and attended the Instructor-led portion of the training

Customer Work Contributions:

- Successful completion of the Xper Information Management Clinical Super User prerequisite eLearning modules is required prior to registration for this course.
-

- The eLearning modules are located on the Philips Learning Center (PLC).
- Attendance and completion of the Instructor-led Training

Estimating Assumptions on Work:

- Customer personnel and resources, defined in the project plan are made available at the times defined by the project plan.
- Training is held at a designated Philips Training Center location.

Limitations on Work:

- Training is good for one (1) year from the purchase date. Any unused training will expire after this time.
- Training classes are scheduled in advance and registration is on a first come, first serve basis.
- Notify Philips a minimum of two (2) weeks in advance of any changes to registration.

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Xper IM Clinical Super User 1 **Pre-Requisite e-learn**

Xper Information Management Clinical Super User Pre-Requisite eLearning

Overview

This **eLearning** training course provides the trainee with the knowledge and skills required for successful completion of the Xper Information Management Clinical Super User ILT Course. This training is designed for new Xper IM clinical Super Users (RN's, RCIS's, RT's, or CVT's) who are unfamiliar with the Xper Information Management application, Flex Cardio Hemodynamic system, and implementation process.

The elearning is taught using a combination of presentation, demonstration, and hands on experience, all through a virtual computer-based training environment. This course also has a downloadable supplement document, which is to be read during this course.

Upon completion of this course, Clinical Super Users should be able to implement the skills learned to add users to their database, employing all the security features available within the application. They should be able to create User Roles based on user's job functions and/or application functions, within the department. The skills learned in this elearning module will be necessary for the successful completion of the Clinical Super User instructor-led course.

Features

- Individuals who successfully complete this elearning training will be able to:
- Explain, in general terms, the features and functions available in the Xper IM Application
- Describe the function of each of the components comprising the Xper IM network
- Describe how to maneuver through the application using the function Beans
- Explain how to log into the application
- Identify how to meet the demands of the hospital's rigid user security requirements by utilizing the security features of the Xper IM Hemodynamic System.

Recommended Attendees

- Xper Information Management Clinical Super Users (RN's, RCIS's, RT's, or CVT's) – Not for IT's.
- The prospective student should have knowledge of clinical procedures and facility workflow, basic PC knowledge of Windows OS (copy, paste, find files, keyboard and mouse usage).

- Students should have the authority to make decisions regarding database changes for their facilities.

Engagement Deliverables

- The elearning course can be accessed online from the Philips Learning Center (PLC).
- The elearning course is not available in CD/DVD format.

Engagement Completion Criteria

- Successful completion of the Xper Information Management Clinical Super User Pre-Requisite elearning course will be based on completing the quiz through the PLC.
- The project manager can close this project task once the customer is registered in the PLC and enrolled in this elearning course.

Customer Work Contributions

- Work with Project manager/Learning Center to create an account on the Philips Learning Center (PLC) and enroll in the elearning course.
- Completion of this elearning course quiz is required prior to registering for the Xper Information Management Clinical Super User ILT Course.
- Customers must commit to completing the elearning before the enrollment expires.
- The elearning course is compatible with Windows and Apple base computers.
- The PLC website contains the latest list of recommended browsers and computer settings for optimal performance.
- Audio performance is enhanced with the use of headphones or earphones.

Estimating Assumptions on Work

The elearning course is located on the Philips Learning Center.

Limitations on Work

Once the trainee is enrolled, he or she will have a maximum of six weeks to complete the elearning course. If the elearning course is not completed before the expiration date, the Project Manager or Learning Center will have to re-enroll the trainee.

The eLearning module within the Xper Information Management Data Analytics eLearning Program will harmoniously compliment the Philips Applications Consultant clinical build and support activities. The interactive, eLearning modules will focus on key functions and transactions in the system providing the learner with the foundational knowledge necessary to successfully use the Query module within the Xper Information Management application. This course is designed for clinical key operators who will be tasked with gathering patient statistical data from the Xper Information Management Application.

The eLearning modules will include knowledge checks and a final assessment to ensure that the participant understands the concepts and how to implement them. Finally, participants will be able to revisit these modules as part of ongoing performance support.

Features

Individuals who participate in this course will be able to:

- Display the Query Wizard.
- Describe the contents of the Xper Information Management System Query Wizard dialog.
- Create a date-range query.
- Describe the contents of, and demonstrate how to use the Custom Parameter dialog to create custom query parameters
- Display the Query Wizard Module.
- Demonstrate how to use the Custom Report Builder.
- Demonstrate how to use the Batch Scheduler to automate reports.

Recommended Attendees

- Xper Information Management Clinical Key Operator (RN's, RCIS's, RT's, or CVT's) – This is not an IT course.
- The prospective student should have knowledge of clinical procedures and facility workflow, basic PC knowledge of Windows OS (copy, paste, find files, keyboard and mouse usage).
- Student should have the ability and authority to determine what statistical reports are needed for your facility.

Engagement Deliverables

- The eLearning course can be access via the Philips Learning Center.

Engagement Completion Criteria

- Successful completion of all eLearning modules within the Xper Information Management Data Analytics eLearning Program.

Customer Work Contributions

- The student will have successfully completed all eLearning modules within the Xper Information Management Data Analytics eLearning Program.
- Customers must commit to completing the eLearning prior to the Applications Consultant clinical build and support activities.

Estimating Assumptions on Work

- The eLearning course is located on the Philips Learning Center.
-

Limitations on Work

- This eLearning course is not required prior to Go-Live of the application.
- The Query (Data Analysis) module must be activated within the Xper Information Management Application (purchasable option).

24

Contracts - Onsite PS Hours 60

Philips Healthcare applies disciplined project management methodology to delivery of each engagement. Our methodology closely parallels the Project Management Institute's (PMI) worldwide -recognized framework of Initiating, Planning, Executing, Controlling and Closing. The Philips team, led by an experienced project manager, will work with you throughout the duration of the project to deliver the products and services described in this quotation. Team members typically include the following:

- Implementation Specialists - responsible for technical work such as installation and configuration of the system hardware and software
- Application Consultants – responsible working within the clinical environment providing expertise in workflow, application configuration and training
- Integration Engineer – responsible for development and testing of HIS and clinical interfaces

The work effort to implement your solution is based upon the specific configuration that has been defined in the quotation. The Statement of Work (SOW) or Project Scope Document (PSD) describes how the solution will be implemented within your environment.

For Government accounts, signed meeting minutes of the work effort involved can also be used as a substitute for the signed SOW.

25

Contracts - Onsite Training PS hours 40

Provides onsite training to be delivered by a Philips Healthcare Application Consultant. Training is valid for one year from the date of purchase. Any unused training will expire after this time. Refer to the Statement of Work (SOW) or Project Scope Document (PSD) for additional detail.

For Government accounts, signed meeting minutes of the work effort involved can also be used as a substitute for the signed SOW.

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Contracts - Remote PS hours 284

Philips Healthcare applies disciplined project management methodology to delivery of each engagement. Our methodology closely parallels the Project Management Institute's (PMI) worldwide -recognized framework of Initiating, Planning, Executing, Controlling and Closing. The Philips team, led by an experienced project manager, will work with you throughout the duration of the project to deliver the products and services described in this quotation. Team members typically include the following:

- Implementation Specialists - responsible for technical work such as installation and configuration of the system hardware and software
 - Application Consultants – responsible working within the clinical environment providing expertise in workflow, application configuration and training
 - Integration Engineer – responsible for development and testing of HIS and clinical interfaces
-

The work effort to implement your solution is based upon the specific configuration that has been defined in the quotation. The Statement of Work (SOW) or Project Scope Document (PSD) describes how the solution will be implemented within your environment.

For Government accounts, signed meeting minutes of the work effort involved can also be used as a substitute for the signed SOW.

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Xper OffSite Technical Training (Biomed) 1

Overview

This three and a half day (3.5) training course is focused on the physiomonitoring system within the cath lab, the associated computer workstations, and peripheral equipment. During the course, the participants will learn about system functionality, maintenance, troubleshooting, and repairs. The training course is ideal for the clinical (biomedical) engineer responsible for servicing this equipment. The class is taught using a combination of demonstration and hands-on experience. The training course is held at a designated Philips Training Center. The price includes air travel, ground transportation, hotel accommodations, lunch, and a daily allowance for breakfast and/or dinner at the hotel.

Features

- Describe and demonstrate how to:
- Establish program for and perform hardware and software Periodic Maintenance (PM).
- Understand the communication flow from Xper Flex Cardio Device to workstation to network.
- Test and troubleshoot Xper Monitoring system components.
- Test, troubleshoot, and repair faulty computer components.

Recommended Attendees

Staff member familiar with core competencies in maintenance, troubleshooting, and repair of biomedical equipment.

Engagement Deliverables

Three and a half days Xper IM Technical Training course

Engagement Completion Criteria

Attendance of one person at Xper IM Technical Training course

Customer Work Contributions

Select appropriately skilled resource to attend training with core competencies in maintenance, troubleshooting and repair of biomedical equipment.

Limitations on Work

- Training is good for one (1) year from the purchase date. Any unused training will expire after this time.
- Training classes are scheduled in advance and registration is on a first come, first serve basis.
- Notify Philips a minimum of two (2) weeks in advance of any changes to registration.