

**100215 Allura Xper FD20**

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

Line #	Part #	Description	Qty
--------	--------	-------------	-----

1    **\*\*NNAE374**    **Allura Xper FD20 C Rel7.6 Vasc**    **1**

The Allura Xper FD20 single plane cardiovascular system is comprised of a ceiling mounted stand and digital imaging X-ray system for cardiovascular diagnostic and interventional procedures

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

## 100215 Allura Xper FD20

Line #	Part #	Description	Qty
--------	--------	-------------	-----

### 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 79 to 107 cm
- Maximum cantilever of 223 cm , for full patient coverage
- Maximum patient weight 250 kg with 25 kg of accessories plus 500 N for CPR 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)
- One Table-mounted Radiation Shield
- One anti-fatigue mat with Philips logo

### X-ray Generation

The Allura Xper FD20 comprises an integrated dedicated X-ray system, micro-processor controlled Velara CFD 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 Velara CFD generator comprises:

- X-ray generator 100 kW
- Voltage range is 40 - 125 kV
- Maximum current 1250 mA at 80 kV
- Program selection
- Pulsed X-ray for pulsed fluoroscopy; 3.75, 7.5, 15 and 30 frames/s
- Pulsed X-ray for (subtracted) acquisition up to 6 frames/s for vascular applications
- Minimum exposure time of 1 ms
- Automatic kV and mA control for optimal image quality prior to run to save dose
- An X-ray depth collimator with two semi-transparent wedged filters with manual and automatic positioning
- SpectraBeam filtering of low energy radiation to optimize image quality and dose efficiency with MRC-GS 0407 X-ray tube.
- Grid switching at dynamic pulsed fluoroscopy

## 100215 Allura Xper FD20

Line #	Part #	Description	Qty
--------	--------	-------------	-----

- Xper Beam Shaping, positioning of both shutters and wedges 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 (Formerly Trace Subtract Fluoroscopy)
  - A Roadmap Pro run is a vessel map an acquisition superimposed on live fluoroscopy
    - Acquisitions can be performed without losing the vessel map
  - Roadmap Pro features Smart Settings in special clinical modes that are optimized to visualize special materials such as coil and glue.
  - Automatic Motion Compensation (AMC) part of the roadmapping functionality. During roadmapping, small patient movements 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 applications where subtraction imaging is used.
    - **Disclaimer:** AMC only corrects movement artifacts in two dimensions. Three dimensional movements such as swallowing or rotation of the head cannot be corrected.
  - Xres for vascular is a standard feature of Roadmap Pro
    - Xres is a multi-resolution spatial temporal noise reduction and edge enhancement filter
    - Xres Vascular enhances sharpness, contrast, and reduces noise in non subtracted fluoroscopy runs for vascular studies.
    - The settings for Xres can be customized with regard to the image quality.
- 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.

### IMAGE DETECTION

The Allura Xper 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 14 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) >73 %
- The pixel pitch: 154 x 154 microns

### Viewing

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

### Displays

## 100215 Allura Xper FD20

Line #	Part #	Description	Qty
--------	--------	-------------	-----

### Examination Room

Two 18-inch monochrome LCD monitors designed for medical applications. The first display is used for viewing live images. The second display is the reference monitor.

- 18-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 2, 3, 4, 6 or 8 18-inch 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.

- The first reference channel is for the display of reference images or runs, controlled by infrared 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 18-inch monochrome LCD monitor (Xper review monitor) designed for medical applications.

- 18-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

## 100215 Allura Xper FD20

Line #	Part #	Description	Qty
--------	--------	-------------	-----

- 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 images/s at 2048 x 2048, 12-bit matrix

The Allura Xper 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

## 100215 Allura Xper FD20

Line #	Part #	Description	Qty
		<ul style="list-style-type: none"><li>• Store to Reference image file</li><li>• Copy image to photo file</li><li>• Digital (fixed) zoom and panning</li><li>• Recall reference images</li><li>• Laser pointer, intended to point at regions of interest on the imaging monitors<ul style="list-style-type: none"><li>• LED indication of laser pointer on/off and battery low</li></ul></li><li>• Subtraction on/off</li><li>• Remasking</li><li>• Landmarking</li></ul>	

### 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 T.S.O. module can be positioned on all sides of the patient table, while keeping the button operation intuitive. The Xper Geometry T.S.O. 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 T.S.O. module can also be positioned on three sides of the patient table, while keeping the button operation intuitive. The Xper Imaging T.S.O. 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

## 100215 Allura Xper FD20

Line #	Part #	Description	Qty
--------	--------	-------------	-----

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

## 100215 Allura Xper FD20

Line #	Part #	Description	Qty
--------	--------	-------------	-----

The review page allows for reviewing of patients:

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

### Archive

Continuous Autopush

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. 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:



## 100215 Allura Xper FD20

Line #	Part #	Description	Qty
		<p>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. <b>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).</b></p> <p>The above education entitlements expire one (1) year from equipment delivery date. Ref# 106107318-091207</p>	
2	<b>**NCVB731</b>	<p><b>FlexMove</b></p> <p>FlexMove</p> <p>Performing a complex and/or minimally invasive procedures can be a breath-taking and tense intervention. During these procedures there is a need for a highly versatile system which can be adapted to any situation and any type of workflow.</p> <p>The Allura Xper family with FlexMove option can provide this versatility. The Allura Xper system with FlexMove provides the flexibility needed during these procedures.</p> <p>Workflow:</p> <p>The Allura Xper family with the FlexMove option consists of a totally new ceiling construction for the ceiling mounted Allura Xper FD series (FD20 and FD10 monoplane) and for the ceiling mounted Allura Xper FD ORT Table series (FD20 and FD10 monoplane):</p> <ul style="list-style-type: none"> <li>• The new ceiling construction allows the system to be steered over the patient by using a joy-stick which prevents table panning which is not wanted in a lot of cases</li> <li>• The system can be positioned behind a physician or someone of the staff which gives them all the space they need around the patient and can be moved in a simple manor whenever needed</li> <li>• The new ceiling construction allows the system to be moved around the patient and be brought in from any position</li> <li>• When a minimally invasive procedure has to convert to open surgery, the system can easily be moved out of the way.</li> <li>• The Allura Xper system with FlexMove takes only limited amount of space around the table and for that reason has limited impact on the workflow of the physicians and staff in the room</li> </ul> <p>Operating area:</p> <p>The Allura Xper with FlexMove option allows placement in a normal operating theater.</p> <ul style="list-style-type: none"> <li>• The new ceiling construction enables the use of Laminar Airflow</li> <li>• In case no imaging is needed, the system can be parked in the corner, which allows a normal operating area when doing open surgery and enables the user to make full use of the lab</li> <li>• The head-end side of the patient is still available for anesthesia and therefore not blocked by the Allura system</li> </ul>	1
3	<b>**FCV0604</b>	<p><b>DoseAware Bundle</b></p> <p><b>DoseAware Bundle</b></p> <p>DoseAware is a unique solution providing staff working in an X-Ray environment with direct, real time dose feedback, enabling them to optimize their behaviour and reduce exposure to scattered dose. The DoseAware bundle comprises:</p>	1

## 100215 Allura Xper FD20

Line #	Part #	Description	Qty
--------	--------	-------------	-----

- 1 BaseStation Package
- 10 PDMs
- DoseManager
- 2 PDM racks.

### Base Station Package

The Base Station is the heart of the DoseAware system. 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 DoseAware Dose Manager software via a standard network interface to complete the DoseAware system with archiving and reporting functions.

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.

### 10 Personal Dose Meters

The Personal Dose Meter (PDM) is a small and easy to wear active X-ray dose meter intended to measure and store received X-ray dose of staff, present in an X-ray room during radiation. The PDM has build-in radio-frequency wireless communication (868.3 Mhz for Europe version, 915 Mhz for USA version) 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, DoseView, and Dose Manager Software.

### Dose Manager Package

The Dose Manager is a software program that serves as archive and reporting facility for all dose data of the DoseAware system. It allows tracking of multiple PDM's at a location.

Core functionality is:

- Store and manage dose history for multiple PDM's
- Collect all dose history from connected Base Stations via the network
- Browse dose history of PDM's as graph or table
- Export dose data for personal analysis with other software tools, like Windows Excel
- Create and print reports of dose history

4	**NCVA014	Maximus Rotalix Ceramic Grid Switch T A MRC200-GS	1
---	-----------	--	---

## 100215 Allura Xper FD20

Line #	Part #	Description	Qty
--------	--------	-------------	-----

30kW small focus and 67 kW Large focus loading with anode heat storage capacity of 2.4 MHU.

Features:

- Maximus ROTALIX Ceramic tube with 0.4 / 0.7 mm nominal focal spot values.
- Tube housing ROT-GS 1004 for oil cooling with built-in thermal safety switch
- Grid switching with dynamic pulsed fluoroscopy
- Rotor control unit for continuous rotation of the anode disk.
- Cooling unit CU 3000 heat exchanger for direct and continuous forced cooling with oil.
- High Voltage cables

5	<b>**FCV0587</b>	<b>Xper Live/Ref Slaving</b>	<b>2</b>
---	------------------	------------------------------	----------

Xper Live/Ref Slaving

The Xper Live/Ref Slaving will enable the option to slave the Live or Ref video source from the Allura Xper. The total amount of Xper Live/Ref Slaving that can be selected is max 4.

Xper Live/Ref Slaving is possible:

- In Control Room icw FCV0011(B/W monitor in Control Room)
- In Philips MCS (additional monitor excluded from this option)
- Icw FCV0519 1 or 2 MCS from Skytron/Steris

6	<b>**NCVA089</b>	<b>RIS / CIS DICOM interface</b>	<b>1</b>
---	------------------	----------------------------------	----------

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 or to 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

## 100215 Allura Xper FD20

Line #	Part #	Description	Qty
		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:	
		<ul style="list-style-type: none"> <li>• Patient name</li> <li>• Patient ID</li> <li>• Birth date</li> <li>• Sex</li> </ul>	
		Examination/Request Information:	
		<ul style="list-style-type: none"> <li>• Accession number</li> <li>• Performed procedure step status start/end date and time</li> <li>• Performing physician's name</li> <li>• Referenced image sequence</li> </ul>	
		Radiation dose:	
		<ul style="list-style-type: none"> <li>• Total time of fluoroscopy</li> <li>• Accumulated fluoroscopy dose</li> <li>• Accumulated exposure dose</li> <li>• Total dose</li> <li>• Total number of exposures</li> <li>• Total number of frames</li> </ul>	
		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.	
7	<b>**NCVA781</b>	<b>Dicom Print compose</b>	1
		Dicom Print provides the possibility to interface to any DICOM Printer. This is an automated printing protocol. The option provides Print Manual Overrides, Print Job submission, and Print Job management.	
8	<b>**NCVA080</b>	<b>Automatic Position Control (APC)</b>	1
		The Automatic Position Controller (APC) for Integris Allura Flat Detector systems provides two modes of operation:	
		<ul style="list-style-type: none"> <li>• 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.</li> <li>• 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.</li> </ul>	
9	<b>**NCVA258</b>	<b>CO2 View Trace Software</b>	1
		Software package which enables tracing (stacking) of images acquired with CO2 injections. This function can be used during postprocessing next to view trace of images acquired with iodine injection.	

## 100215 Allura Xper FD20

Line #	Part #	Description	Qty
--------	--------	-------------	-----

10    **\*\*NCVA695**    **FD Rotational Angio**    **1**

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.

11    **\*\*NCVA694**    **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.

## 100215 Allura Xper FD20

Line #	Part #	Description	Qty
		<p>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.</p> <p>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.</p> <p>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.</p> <p>Comprising:</p> <ul style="list-style-type: none"> <li>• automatic exposure control</li> <li>• tabletop motordrive and hand-held speed controller (tableside)</li> <li>• technique selection using Xper module, available both tableside and in control room (Xper FD20, FD20/10)</li> </ul>	
12	<b>**NCVA801</b>	<b>Table APC</b>	<b>1</b>
		<p>The Automatic Position Controller (APC) for the table provides two modes of operation:</p> <ul style="list-style-type: none"> <li>• 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.</li> <li>• Store/recall of a position of the table top. This includes the height-, longitudinal- and lateral position of the table top.</li> </ul>	
13	<b>**NCVA693</b>	<b>FD Dual Fluoro</b>	<b>1</b>
		<p>Dual Fluoro for Flat detector systems</p> <p>The Dual Fluoroscopy mode allows digitally processed fluoroscopy in parallel with trace subtract fluoroscopy, providing a non subtracted reference fluoro image for complex interventions.</p> <p>This option provides an additional fluoro channel in parallel to the default fluoro channel. The Dual fluoroscopy mode is selected via the Xper module.</p> <p>The trace subtracted fluoro image will be displayed on the exam monitor, the non-subtracted fluoro image is displayed on the reference monitor.</p> <p>In Dual Fluoro mode, The fluoroscopy image on the exam monitor 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.</p>	
14	<b>**NCVA672</b>	<b>FD SmartMask</b>	<b>1</b>
		<p>SmartMask simplifies roadmapping procedures by overlaying a selected reference image with fluoroscopy on the live monitor in the exam room.</p> <p>The reference image can be faded in/out with variable intensity, controlled from tableside.</p> <p>SmartMask uses the reference image displayed on the reference monitor.</p> <p>Any previously acquired image can be used as reference.</p> <p>SmartMask facilitates pre- and post- intervention comparisons to assess treatment results</p>	
15	<b>**NCVA121</b>	<b>FULL AUTOCAL</b>	<b>1</b>

## 100215 Allura Xper FD20

Line #	Part #	Description	Qty
--------	--------	-------------	-----

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

**16      \*\*NCVA786      Vascular Quant.Sw pkg(Xper)      1**

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.

Compatible with:

- Allura Xper FD10 Rel 3 and FD10/10 Rel 2 onwards
- Allura Xper FD20 Rel 2 and FD20/10 Rel 2 onwards
- Allura CV20 R1 onwards

**17      \*\*NCVB236      US integration package      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

**18      \*\*NUSM051      CX50 CompactXtreme - Integrated Ultrasound System      1**

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

- Patient data Integration:
  - Allura Xper patient information automatically transfers to the CX50

## 100215 Allura Xper FD20

Line #	Part #	Description	Qty
--------	--------	-------------	-----

- X-Ray and ultrasound patient studies may be configured with unique or identical study ID's to easily store and locate studies in DICOM
- Image display Integration:
  - 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

### Vascular Clinical Package, with L12-3 Linear Array Transducer

- L12-3 fine pitched, high resolution linear array with 12 to 3 Mhz extended operating frequency range for vascular, small parts and musculoskeletal applications.
- This clinical option includes Tissue Specific Imaging software and SonoCT for Cerebrovascular, Peripheral Vascular and Abdominal Vascular applications. This clinical option also includes in-depth analysis and reporting packages for vascular applications. Freehand 3D is also provided within this clinical option. Allows operation for vascular applications of the C5-1, S5-1 and L12-3 transducers.

### System Overview:

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. Also supports the high resolution L12-3 linear array transducer. All transducers provide breakthrough frequency bandwidths and array configurations. These transducers also have ergonomically designed lightweight flexible cables and compact connectors.

### Modes:



# 100215 Allura Xper FD20

Line #	Part #	Description	Qty
		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	
		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	
		Scheduled Preventative Maintenance and System Optimization	
		<b>Netlink/DICOM 3.0</b>	
		Provides DICOM 3.0 network Print and Store, Performed Procedure Step (PPS), and Modality Worklist functionality. Networking capability supportable in both wired and wireless environments.	
		<b>Cart</b>	
		Highly mobile cart which includes: 4 swivel wheels with 2 locking casters, rear handle, micropositioning grips, quick-connect tray, utility drawer, storage shelf, footrest, integrated transducer connector holder, gel holders and cable management.	
19	**NUSM057	Limited Radiology Clinical Option Package w/ C5-1	1
		This clinical option package includes the C5-1 transducer and Abdominal and Small Parts clinical options.	
		C5-1 broadband, Curved Array PureWave crystal transducer with 5 to 1 Mhz extended operating frequency range for abdominal, interventional and vascular applications.	
		Abdominal Clinical Option – This clinical option includes abdominal Tissue Specific Imaging software, SonoCT and Freehand 3D for abdominal applications. This clinical option also includes	

## 100215 Allura Xper FD20

Line #	Part #	Description	Qty
		analysis and reporting packages for abdominal applications. Allows operation for abdominal applications of the C5-1, S5-1 and L12-3 transducers.	
		Small Parts Clinical Option – This clinical option includes small parts Tissue Specific Imaging software, SonoCT and Freehand 3D for a wide range of small parts applications (eg. Breast, thyroid, testical). This clinical option also includes analysis and reporting packages for small parts applications. Allows operation for small parts applications of the L12-3 and C5-1 transducers.	
20	<b>**FUS5081</b>	<b>S5-1 Broadband Phased Array</b>	<b>1</b>
		PureWave crystal Sector array transducer with 5 to 1 MHz extended operating frequency range for adult cardiology, abdominal, vascular, TCD and Acute Care.	
21	<b>**FUS5101</b>	<b>USA Power Cord</b>	<b>1</b>
22	<b>**FUS7000</b>	<b>English Manual</b>	<b>2</b>
		Operation Manual	
23	<b>**FUS8201</b>	<b>Service Manual</b>	<b>2</b>
24	<b>**NCVA783</b>	<b>Pivot for table base.</b>	<b>1</b>
		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:	
		<ul style="list-style-type: none"> <li>• pivot device with graduated scale to be mounted on the universal floor plate of the table.</li> </ul>	
		Compatible with Xper Table	
25	<b>**NCVA792</b>	<b>SyncraTilt and Cradle</b>	<b>1</b>
		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.	

## 100215 Allura Xper FD20

Line #	Part #	Description	Qty
--------	--------	-------------	-----

In addition, this option also 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.

The option provides:

- maximum tilt range:
- -17 degrees (head down) to +17 degrees (head up).
- tilt speed: 2 degrees/sec
- 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
- panning range in tilted plane: equal to the standard tabletop specifications (longitudinal 120cm, lateral 35cm)
- easy to use controls

Comprising:

- Tilt and cradle drives 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

Power requirements: refer to system configuration

26	<b>**NCVA101</b>	<b>Peripheral X-ray Filter</b>	<b>1</b>
	Set of flexible x-ray filters to provide an uniform density in angiographic examinations of the lower peripheral area.		
	Comprising:		
	<ul style="list-style-type: none"> <li>• one central filter, at the top edge provided with sizing markers at every 5 cm, length : 1 m</li> <li>• two side filters, length: 1 m</li> </ul>		

27	<b>**NCVB171</b>	<b>3D-RA R.6</b>	<b>1</b>
	Allura 3D-RA assists physicians in decision making for treatment strategy in endovascular procedures, neuro or vascular surgery or even radiotherapy.		
	Allura 3D-RA reduces the number of DSA acquisitions and fluoroscopy time needed to perform an examination. This means less X-Ray dose for the patient and the medical staff and a reduced quantity of dye, leading to reduced procedure costs.		
	Allura 3D-RA provides a unique assessment after treatment due to the use of non-subtracted images that allows to shows devices stents, coils, clips and provide the optimal stand projection for endovascular treatment.		
	Allura 3D-RA provides a wide range of communication facilities to export 3D images.		

1 Image Acquisition

Image acquisition is performed with the Rotational Angiography feature of the Allura Xper FD

## 100215 Allura Xper FD20

Line #	Part #	Description	Qty
		series with the flexibility to position the C-arm in either head or side position. C-arm in Head position: the Rotational Angiography run is performed over a scan range of 240 degrees with a rotation speed up to 55 degrees/sec. C-arm in Side position: the Rotational Angiography run is performed over a scan range of 180 degrees with a rotation speed up to 30 degrees/sec.	
		2 3D Vessel Reconstruction The rotational run is automatically transferred and displayed as a 3D vessel model: with the Real-Time digital link (option) 120 images are reconstructed into a 3 dimensional model within seconds. Additional reconstructions, using the Reconstructive Zooming Technique, can be performed as well.	
		3 Workflow: Allura 3D-RA in combination with the Allura Xper FD series will provide an optimal workflow via the following workflow enhancers: Complete automated 3D-RA process from 3D acquisition to 3D Viewing: no user interaction needed. 3D at Xper Module (option); With the Xper module the physician has all required 3D functionality at tableside. At the touch screen module functionality like rotating, panning, zooming, AVA, virtual stenting, 3D-APC and 3D Follow C-arc can be performed. With the mouse tablet all other functions can be performed so that there is no need for the Physician to leave the examination room. 3D Automatic Position Control (3D-APC); When the optimal working position has been chosen via the Allura 3D-RA interventional tool, the C-arc will automatically steer to this position. 3D Follow C-arc; When the position of the C-arc (not using any X-ray) is changed, the 3D volume will automatically follow the position of the C-arc. This means the position of the C-arc (and therefore the 2D projection) and the 3D volume are always aligned. As last seen; when the user leaves the patient in the model and later selects that patient again, the Allura 3D-RA interventional tool will return to the image last used by the user. Mouse over: When moving the mouse cursor over a button the mouse over text will show up to explain the function of that specific button.	
		4 Calibration Allura 3D-RA calibrations are performed by Philips Healthcare Customer Support. Allura 3D-RA calibration data are stable over at least 6 months time.	
		5 Viewing A Real Time user interface is available with 3D-RA, providing 3D object viewing in any space direction. A graphical display of (C-arm) stand position including angulation/rotation for any projection. Philips' CRM (Contrast Resolution Management) Technology for a considerable increase in contrast resolution in all volumes. Various Image Rendering possibilities: Volume/Surface Rendering, MIP, Endoscopy, SUM (pseudo x-ray image) Gradient rendering; the possibility to display the vessel structure transparently. Cut-plane function to get a precise insight of the shape of the pathology Orthoviewer providing a multi-planar visualization of objects using the different Image Rendering possibilities. MPR (Multi-Planar Reformatting): enables visualization of the volume in all three standard projections (coronal, sagittal and axial) Especially useful for optimal viewing of spine procedures (e.g. Vertebroplasty) SpineView: special acquisition protocol for optimal viewing of the spine, especially osteoporotic vertebrae CalciView: allows visualization of Hyper dense plaque in 3D, separately or in relation to the lumen. 5 different distance measurements calculated in the same volume, including "Quick measurement" feature Volume calculation Automated Vessel Analysis (AVA), provides information on vessel segment diameter, area and	

## 100215 Allura Xper FD20

Line #	Part #	Description	Qty
		<p>length with only three mouse-clicks. Endoscopic and cross sectional views are available.</p> <p>Computer Assisted Aneurysm Analysis (CAAA), providing information on Aneurysms, like volume, neck size etc..</p> <p>Catheter tip shape simulation, providing information on how to shape the catheter tip.</p> <p>Virtual stenting; Ability to simulate a stent placement in a selected vessel segment for proper stent sizing. All relevant data of the simulated stent are displayed</p> <p>Annotation: text can be added to a volume to capture comments.</p> <p>Interpolative Zoom</p> <p>Reconstructive Zooming Technique, 2 additional user defined reconstructions focused on the Volume Of Interest (VOI) using different cube size and voxel resolution.</p> <p>Subtraction of reconstructed volumes, allowing to visualize vessels without embolization devices (stents, coils, clips,...) to assess the outcomes of treatment</p> <p>Automatic Voxelshift: compensates for movement when rendering subtracted or superimposed volumes</p> <p>Set the grey values WW/WL</p> <p>Store/Recall of user defined projections.</p> <p>6 Archiving</p> <p>Transfer to:</p> <p>Optional Hard Copy unit (DICOM Print)</p> <p>Any optional DICOM compatible device (e.g. PACS/ViewForum/Xcelera), supported are DICOM XA, DICOM SC, DICOM CT and DICOM 3D</p> <p>Any PC in a standard PC compatible format (JPEG,AVI)</p> <p>One or multiple DVD's, CD-ROM(s) for easy archiving</p> <p>Store a subset of exportable objects (snapshots and AVI Movies) to a USB removable memory device.</p> <p>Clinical Education Specialists will provide sixteen (16) hours of tailored CV 3DRA OnSite Education for up to four (4) students, selected by customer, including technologists from night/weekend shifts if necessary. CEUs are not available in all cases. Please read Guidelines for more information, which will be provided to you during the scheduling process. Education Hours: Mon – Fri 8:00am to 5:00pm, except Monday and Friday are half-days to allow for trainer's travel. Note: Philips personnel are not responsible for actual patient contact or operation of equipment during education sessions except to demonstrate proper equipment operation. Education expires one (1) year from equipment delivery date (or purchase date if not sold with equipment).</p>	
28	<b>**NCVA857</b>	<p><b>Flat Panel Display 3DRA</b></p> <p>Hardware Option providing a 19" LCD color monitor to be used in the control Room in combination with the Interventional Tools.</p> <p>Comprising:</p> <ul style="list-style-type: none"> <li>• 19" SXGA LCD color monitor</li> <li>• Manual</li> </ul> <p>Compatible with:</p> <ul style="list-style-type: none"> <li>• NCVA566 Interventional Hardware and related software</li> </ul>	1
29	<b>**NCVA566</b>	<p><b>Interventional Hardw.(RT prep)</b></p>	1

## 100215 Allura Xper FD20

Line #	Part #	Description	Qty
		The interventional hardware is a special platform designed for the Philips interventional software Integris 3D-RA, StentBoost and/or Allura 3D-CA	
		The Interventional Hardware comprises at least:	
		<ul style="list-style-type: none"> <li>• Dell Workstation</li> <li>• 2048 MB memory</li> <li>• Primary hard disk for the Operating system</li> <li>• Secondary 72 GB hard disk for application data</li> <li>• Internal CD-ROM</li> <li>• External DVD writer</li> <li>• Operating Software</li> <li>• Microsoft Windows XP Professional UK Operating System</li> </ul>	
		Conditionally:	
		<ul style="list-style-type: none"> <li>• Integris 3D-RA Calibration Tool Kit</li> <li>• Grids for pincushion distortion and focus shift calibration</li> <li>• Phantom for geometry calibration</li> <li>• Phantom for user validation</li> <li>• Allura 3D-CA</li> <li>• Phantom for geometry calibration</li> <li>• StentBoost</li> <li>• Phantom for user validation</li> </ul>	
		Compatible with:	
		<ul style="list-style-type: none"> <li>• Integris series with connectivity release</li> <li>• Allura Xper series</li> </ul>	
30	<b>**NCVA116</b>	<b>3D RA Control for Xper Module</b>	<b>1</b>
		<p>Table Side Module functionality for Allura Xper FD20 used with Integris 3D-RA Release 4.2.</p> <p>For further improvement of interventional procedures efficiency the following workflow enhancers are made available in the examination room: With the Xper touchscreen module the physician has all 3D functionality needed at tableside. Functionality like rotating panning zooming AVA Virtual stinting 3 and 3D Follow C-arc can be performed. No need for the Physician to leave the examination room. 3D Automatic Position Control (3D-APC); when the optimal working position has been chosen via the Integris 3D-RA interventional tool the C-arc will automatically steer to this position. 3D Follow C-arc. When the position of the C-arc (not using any X-ray) is changed the 3D volume will automatically follow the position of the C-arc. This means the position of the C-arc (and therefore the 2D projection) and the 3D volume are always aligned.</p>	
31	<b>**NCVA590</b>	<b>Real time image link</b>	<b>1</b>
		<p>Real Time digital image link to an off-line Allura Interventional Hardware station. This applies on the applications 3D-RA, StentBoost and 3D-CA on the Interventional Hardware. This dedicated digital link sends raw or processed image data (depending on the application) real time during monoplane exposures to the connected Interventional Hardware station, to allow instant results of the applicable reconstruction after the exposure run.</p> <p>In biplane systems, this digital link is available for the frontal channel only.</p>	
32	<b>**NCVB167</b>	<b>MR/CT Roadmap</b>	<b>1</b>

## 100215 Allura Xper FD20

Line #	Part #	Description	Qty
		<p>MR/CT Roadmap extends the capabilities of the integrated 3D product by providing a sustainable 3D roadmap based on previous acquired CT or MR scans to support interventional procedures. The MR/CT Roadmap option matches the real-time 2D fluoroscopy images with the 3D volume of CT or MR.</p> <p>The CT or MR data can visualize in either 3D (e.g vascular structure) or with 2D slice in the same orientation as the 2D fluoro image. It provides a 3D real time insight of the advancement of the guide wire, catheter and coils through complex vessel and anatomical structures</p> <p>Image Acquisition</p> <p>A previously acquired CT or MR scan can be imported into the system and matched with a low dose 3D-RA or XperCT scan The MR/CT Roadmap is activated with one button touch at tableside (Xper Module). Select the MR/CT Roadmap function on the touch screen module, activate fluoroscopy and the MR/CT Roadmap is activated. The "live" 2D fluoroscopy image is overlaid with the MR/CT volume presented in 2D or 3D and is automatically displayed on the roadmap monitor in both the examination and control room.</p> <p>Intuitive, fully controlled from tableside:</p> <p>The bidirectional link between the X-ray system and the MR/CT Roadmap allows the user to select the optimal stand position for the procedure in two ways. 3D Automatic Position Control allows the gantry to automatically move to the best interventional projection as shown on the MR/CT Roadmap monitor. 3D Follow C-arc allows the MR/CT Roadmap to remain in sync with the 2D projection, automatically adjusting viewpoint as the gantry is repositioned.</p> <ul style="list-style-type: none"> <li>• Easy 2 step registration of the MR/ CT volumes</li> <li>• Landmarking to adjust the intensity of the anatomical reference surrounding the vessels and tissue</li> <li>• 2D and 3D blending to fade in/out the 2D or 3D view;</li> <li>• WW/WL settings to control the contrast/brightness;</li> <li>• Store and review runs for reporting and archive purposes;</li> <li>• Store snapshots and movies.</li> </ul> <p>MR/CT Roadmaps can be sent to:</p> <ul style="list-style-type: none"> <li>• Any optional DICOM compatible device (e.g. PACS/ViewForum/Xcelera), supported are DICOM XA, DICOM SC, DICOM CT and DICOM 3D.</li> <li>• Any PC in a standard PC compatible format (JPEG,AVI)</li> </ul> <p>And stored/archieved on</p> <ul style="list-style-type: none"> <li>• A PACS systems as DICOM Secondary Capture images or movies.</li> <li>• USB removable memory device.</li> <li>• One or multiple DVD's, CD-ROM(s) for easy archiving.</li> <li>• Hard copy via the (DICOM Print) protocol.</li> </ul>	
33	***NCVB168	3D Roadmapping Rel2	1
		<p>3D Roadmap extends the capabilities of the integrated 3D product by providing a sustainable 3D roadmap to support interventional procedures. The 3D Roadmap option matches the real-time 2D fluoroscopy images with the 3D-RA reconstruction of the vessel tree. It provides a 3D real time insight of the advancement of the guide wire, catheter and coils through complex vessel structures. 3D roadmap has automatic motion compensation for the neuro runs. When the automatic motion compensation function is active, this functionality will constantly correct the motion artifacts which can be present in the 3D Roadmap image.</p> <p>Image Acquisition</p> <p>The 3D Roadmap is based on the visualization of the vessel tree out of 3D-RA The 3D Roadmap is activated with one button touch at tableside (Xper Module). Select the 3D Roadmap function on the touch screen module, activate fluoroscopy and the 3D Roadmap is activated. The "live" 2D fluoroscopy image is overlaid with the 3D volume of the vessel tree and is automatically displayed on the 3D roadmap monitor in both the examination and control room.</p>	

## 100215 Allura Xper FD20

Line #	Part #	Description	Qty
--------	--------	-------------	-----

Intuitive, fully controlled from tableside:

The bidirectional link between the X-ray system and the 3D Roadmap allows the user to select the optimal stand position for the procedure in two ways. 3D Automatic Position Control allows the gantry to automatically move to the best interventional projection as shown on the 3D Roadmap monitor. 3D Follow C-arc allows the 3D Roadmap to remain in sync with the 2D projection, automatically adjusting viewpoint as the gantry is repositioned

- Landmarking to adjust the intensity of the anatomical reference surrounding the vessels;
- 3D blending to fade in/out the 3D view;
- WW/WL settings to control the contrast/brightness;
- Store and review runs for reporting and archive purposes;
- Store snapshots and movies.

3D Roadmaps can be sent to:

Any optional DICOM compatible device (e.g. PACS/ViewForum/Xcelera), supported are DICOM XA, DICOM SC, DICOM CT and DICOM 3D

Any PC in a standard PC compatible format (JPEG,AVI)

And stored/archieved on

A PACS systems as DICOM Secondary Capture images or movies

USB removable memory device

One or multiple DVD's, CD-ROM(s) for easy archiving

Hard copy via the (DICOM Print) protocol

<b>34</b>	<b>**NCVA879</b>	<b>Xper CT R2</b>	<b>1</b>
-----------	------------------	-------------------	----------

XperCT extends the capabilities of the angio system offering CT like imaging. The XperCT acquisition scan acquires up to 620 images. The 620 images ensure a high quality reconstruction of a CT-like volume to visualise soft tissue.

XperCT includes frame rate extension to increase the system acquisition speed up to 60 frames per second. The high frame rates are beneficial for the dedicated abdomen protocols: fast acquisitions times in 5 or 10 seconds.

The XperCT imaging process is fully automated in the Xper system. The XperCT 3D volume is displayed automatically within 1 minute (from acquisition to display): no user interaction required. Especially in critical cases it is important to obtain a fast overview.

The 3D volume can be viewed in the control room and in the examination room. The slice view is performed by scrolling through the volume. Slice thickness and ww/wl can be varied upon user need. XperCT can be controlled via the Xper 3D module at tableside.

In addition the XperCT volume can be matched with Allura 3D-RA. This view combines soft tissue information with high-resolution vessel information. The optimal view can be chosen with the orientation of the 3D volume: the C-arc follows automatically.

Pre-requisite:

- Interventional HardWare
- Real Time Link
- FD Rotational Angio
- Frame rate extension

Clinical Education Program for XperCT



## 100215 Allura Xper FD20

Line #	Part #	Description	Qty
--------	--------	-------------	-----

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

**35      \*\*NCVB170      XperGuide Rel2      1**

XperGuide enables real-time needle guidance in the angio suite. Virtual needle paths are created on an XperCT dataset or on the previous acquired CT or MR dataset. This volumetric dataset can be viewed in any slice direction. A wide range of gantry projections can be used to define the needle path.

Path planning can be done:

- By drawing a virtual needle path on an XperCT, MR or CT slice
- By defining entry and target points on different XperCT,MR or CT slices
- By defining a help line on a 3D volume

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

- Changes in the angulation of the C-arm
- Changes in the rotation of the C-arm
- Changes in the field of view
- Changes in the source image distance

XperGuide run are in the same patient file as all other patient related data. All this data can be reviewed at any time.

XperGuide runs are stored together with the XperGuide movies and snapshots can be sent to: Any optional DICOM compatible device (e.g. PACS/ViewForum/Xcelera), supported are DICOM XA, DICOM SC, DICOM CT and DICOM 3D

Any PC in a standard PC compatible format (JPEG,AVI)

And stored/archieved on

A PACS systems as DICOM Secondary Capture images or movies

USB removable memory device

One or multiple DVD's, CD-ROM(s) for easy archiving

Hard copy via the (DICOM Print) protocol

**CV XperGuide Handover OnSite Education:**

## 100215 Allura Xper FD20

Line #	Part #	Description	Qty
--------	--------	-------------	-----

Philips Education Specialists will provide eight (08) hours of education for up to four (4) students, selected by customer, including technologists from night/weekend shifts if necessary. CEU credits may be available for each participant that meets the guidelines provided by Philips. Please refer to guidelines for more information. Note: Site must be patient-ready. Philips personnel are not responsible for actual patient contact or operation of equipment during education sessions except to demonstrate proper equipment operation.

Education expires one (1) year from equipment installation date (or purchase date if sold separately). Ref # 336-100316

36	<b>**NCVB591</b>	<b>2ND REF for FlexVision XL</b>	<b>1</b>
----	------------------	----------------------------------	----------

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

37	<b>**NCVB775</b>	<b>FV XL, No-MCS, XperHD, Snapshot</b>	<b>1</b>
----	------------------	--	----------

FlexVision XL with XperHD

FlexVision XL for Allura Xper Release 7 systems with large 56-inch high resolution color LCD in the Exam Room.

FlexVision XL is an integrated viewing solution designed to give you full control over your viewing environment.

The FlexVision XL provides the ability to:

- Display 2 to 8 screens simultaneously from up to 16 sources (incl. third party systems) on the Philips 56-inch color LCD in the Exam Room.
- Resize and/or enlarge information at any stage during the case.
- Select and customize viewing lay-outs of the Philips 56-inch color LCD via the Allura Xper table-side module

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:

- High Definition imaging
  - Sharp Images at full size without zoom
- High Definition display at native resolution
  - Up to 2k\*2k image display fully integrated
- High Definition for the ultimate detail
  - Enhanced small vessel visualization
- Overview connected equipment (incl. third party systems) from a single location.

The FlexVision XL consists of:

- MediaWall Controller for the large screen display
- OmniSwitch

## 100215 Allura Xper FD20

Line #	Part #	Description	Qty
		<ul style="list-style-type: none"> <li>OmniSwitch allows the user to direct and switch the video output of all connected medical equipment to specific sub windows of the Philips 56-inch color LCD in the Exam Room.</li> <li>OmniSwitch is a 16 channel video-switch operated from the Allura Xper tableside module. 16 channels are available for a mix of up to 7 internal and up to 9 external inputs.</li> <li>OmniSwitch supports a wide variety of display formats (up to 1600x1200).</li> <li>External inputs are connected to OmniSwitch via Wall Connection boxe(s).</li> <li>Medical grade, high resolution color LCD in the Exam Room <ul style="list-style-type: none"> <li>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 system for the Exam Room.</li> <li>Main characteristics are: <ul style="list-style-type: none"> <li>56 inch, 8 Megapixel color LCD</li> <li>Native resolution: 3840x2160</li> <li>Brightness: Max: 450 Cd/m2 (typical) stabilized: 350 Cd/m2</li> <li>Contrast ratio: 1200:1 (typical)</li> <li>Wide viewing angle (approx. 176 degrees)</li> <li>Constant brightness stabilization control</li> <li>Lookup tables for gray-scale, color and DICOM transfer function</li> <li>Full protective screen</li> <li>Ingress Protection: IP-21</li> </ul> </li> </ul> </li> <li>Large color LCD control (Xper Module) <ul style="list-style-type: none"> <li>Resize and/or enlarge information at any stage during the case via the Allura Xper tableside module in the Exam or Control Room</li> <li>Select viewing lay-outs via the Allura Xper table-side module in the Exam Room</li> <li>Create new layouts by matching inputs to desired locations on preset templates.</li> </ul> </li> <li>Isolated Wall Connection Boxes <ul style="list-style-type: none"> <li>Up to 8 Isolated Wall Connection Boxes can be connected to FlexVision XL.</li> <li>Through Isolated Wall Connection Boxes, 3rd party equipment can be connected to the FlexVision Omniswitch.</li> </ul> </li> <li>Snapshot <ul style="list-style-type: none"> <li>The snapshot function allows the user to store/save a screen-capture of any image on any EP cockpit 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 seperate DICOM Secondary Capture images .</li> </ul> </li> </ul>	

With the FlexVision XL on the "No MCS" option, a FlexVision XL can be mounted on a 3 party MCS supplier. This gives the possibility to be more flexible in the positioning of the FlexVision XL in the exam room. This is often requested in Hybrid OR's

38      \*\*989801292102      CV Full Travel Pkg OffSite      4

## 100215 Allura Xper FD20

Line #	Part #	Description	Qty
		Includes one (1) participant's airfare from North American customer location to Cleveland, Ohio, with lodging, ground transportation, and meal expenses. Breakfast/dinner provided by the hotel, and lunch/breaks are catered by Philips. All other expenses will be the responsibility of the attendee. Details are provided during the scheduling process. Note: Cancellation/rescheduling policy strictly enforced.	
		Education expires one (1) year from equipment installation date (or purchase date if sold separately).	
39	<b>**989801292278</b>	<b>CV Add OnSite Clin Educ 28h</b>	<b>1</b>
		Clinical Education Specialists will provide twenty-eight (28) hours of CV OnSite Education for up to four (4) students, selected by customer, including technologists from night/weekend shifts if necessary. CEU credits may be available for each participant that meets the guidelines provided by Philips. Please refer to guidelines for more information. Note: Philips personnel are not responsible for actual patient contact or operation of equipment during education sessions except to demonstrate proper equipment operation. Education expires one (1) year from the earlier of equipment delivery date or purchase date.	
40	<b>**989801292383</b>	<b>Vasc Interventional Tools OffSite 20h</b>	<b>2</b>
		A Philips Clinical Instructor will provide 20 hours (2.5 days) of in-depth didactic, tutorial and hands on training covering the Vascular Interventional Tools used in conjunction with the FD system. This course is designed to provide basic functionality, workflow and application knowledge necessary to fully utilize the Vascular Interventional Tools programs. Due to software release levels, the software used for training may slightly differ from software used at the trainee's facility. This course is highly recommended and will compliment your standard On-site training for Vascular Interventional Tools.	
		This 20 hour course is located in Cleveland, Ohio at the Cleveland Training Center. Due to program updates, the number of class hours is subject to change without notice. The customer will be notified of current total class hours at time of registration. CEU credits may be awarded if the participant meets the ASRT guidelines. <b>Travel and lodging are not included, but may be purchased through Philips. It is highly recommended that 989801292445 (CV Partial Week Travel Pkg Offsite) is purchased.</b>	
41	<b>**980406041009</b>	<b>Rad Shield w/ Arm (Contoured) 61X76</b>	<b>1</b>
		Contoured Rad Shield with Arm rest. 61X76	
42	<b>**989801220065</b>	<b>Medrad Xper Cable Pedestal</b>	<b>1</b>
43	<b>**989801220077</b>	<b>Medrad Provis Pedestal</b>	<b>1</b>
		MARK V PLUS INJECTOR PEDESTAL (BASIC) with Integris interface Power injector for use in Angiographic procedures	
		Includes:	
		<ul style="list-style-type: none"> <li>• Mark V Plus Pedestal 110V/60 HZ. Suitable for two</li> <li>• 150 ml syringes. ( SYS 500-P1DPH1)</li> <li>• Injector head with 6 ft. fixed cable length (IHC 520P)</li> <li>• Integrated startswitch for the pedestal version (KMA 550)</li> </ul>	

## 100215 Allura Xper FD20

Line #	Part #	Description	Qty
		<ul style="list-style-type: none"> <li>Two disposable syringes 150 ml (KMP 777) (2)</li> <li>Two pressure jackets (150 ml) for disposable syringes.</li> <li>( 150-FT-Q) (2)</li> <li>A dual turret (150 ml) (KMA 150P)</li> <li>Operation Manual (KMP 805P)</li> <li>Service Manual (KMP 826-S)</li> <li>A interface cable (14.8 ft) for Integris systems (XMC926)</li> </ul>	
44	<b>**989801220080</b>	<b>Portegra 2 360 Ceiling Column</b> Portegra 2 360 Column w/ trolley and ceiling track	<b>1</b>
45	<b>**989801220082</b>	<b>Volcano Control Console</b> A full-size control console that can be used in the patient room. While one control console is found in the s5i core bundle, some accounts wish to add a second control console to their system. This can be mounted on the bedrails. Connects directly to the CPU via USB or in the patient room via the USB extender. Note: if mounting on bedrails, requires the ordering of "Control Console Rail Bracket Kit"	<b>1</b>
46	<b>**989801220083</b>	<b>Volc Cont Console Rail Brkt Kit</b> Used in conjunction with the full-size control console to allow the console to be mounted to the patient bedrails.	<b>1</b>
47	<b>**989801220084</b>	<b>Volcano Joystick Option Kit</b> A compact joystick that comes with a clamp to be mounted on the patient bedrails. Some physicians prefer to control the IVUS system via a joystick, and this option provides this functionality. Can be operated under the sterile drape.	<b>1</b>
48	<b>**NNAE391</b>	<b>FlexVision XL 8 Input Package</b> The FlexVision XL8 input package provides eight isolated wall connection boxes and eight legacy converters.  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 Legacy Video Convertor The Legacy Video Convertor enables conversion from VGA towards DVI for supported input resolutions as listed in the table below. Signal type Native resolution Image Aspect Ratio VGA 640x480 4:3 SVGA 800x600 4:3 XGA 1024x768 4:3	<b>1</b>

# 100215 Allura Xper FD20

Line #	Part #	Description	Qty
		SXGA 1280x1024 5:4	
		SXGA+ 1400x1050 4:3	
		UXGA 1600x1200 4:3	
		WXGA 1280x800 16:10 (8:5)	
		WSXGA 1440x900 16:10 (8:5)	
		WSXGA+ 1680x1050 16:10 (8:5)	
		WUXGA 1920x1200 16:10 (8:5)	
		2K 2048x1080 19:10	
		TV1080I/P 1920x1080 16:9	
		TV 480I 720x480 4:3	
		TV 480P 704x480 4:3	
49	SP059D	<b>System Admin</b>	1
		Stainless steel table extension	
50	SP059B	<b>Universal Power Supply</b>	1
		989801278228 1Fluoro Protection 480/480,12.5MRT 989801278104 Remote Status Monitor 25'	
		989801278105 Remote Eye II Power *989801278189 Fluoro Only FlexVision Connection Kit The price includes inside delivery and startup of the power solution. For some of the larger units, rigging may be required to accomplish an inside delivery and these costs are not included. Installation is not included, except for single phase units. Philips must review the final connections to the power solution unit before power is applied to the unit. The customer is responsible for providing and installing any wires, conduits, distribution panel/circuit breaker changes as well as any changes to the HVAC systems and building structure supports that may be required to accommodate the power solution.	

FOR INFORMATION PURPOSES ONLY  
THIS IS A SUMMARY SHEET NOT A QUOTE