

# Explore multi-modality images in multiple ways

## Philips IntelliSpace Breast specification\*

Philips IntelliSpace Breast with the IntelliSpace Clinical Applications, help you keep pace with the demands of your radiology department – by giving you the freedom to open, review, and diagnose patients' mammography, ultrasound, and MRI images from a single workspace.

### Key advantages

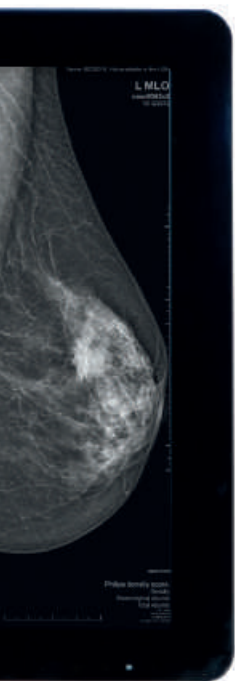
- Save time and space: Current and prior studies are available at a single workspace
- Quality of care: Display past medical history and report data using BI-RADS® standard
- Enhanced workflow: Utilize the available API to interface with your existing reporting or information system

\* Specifications are subject to change at any time without notice.

# PHILIPS



Optional 10mp monitor, ultrasound and MRI options



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\* Multi-modality options powered by IntelliSpace Clinical Applications

# IntelliSpace Breast – Mammography

Workflow	
Password for individual readers	Yes
Configurable worklists per user	Yes
Available default worklists	<ul style="list-style-type: none"> <li>• Patient lookup: General search for patients in system database</li> <li>• Not read by me: Shows all examinations in a specified timeframe which have not been read</li> <li>• My History: Chronological overview of viewed patients</li> </ul>
Patient-focused approach: automatic display of all available prior data for comparison next to the current exam	Yes
Automatic selection of next patient in worklist	Yes
Graphical, patient history timeline: overview of the relevant patient history	Yes

Interoperability	
Multi-vendor compatible	Yes
Cohabitation of reporting and speech software (utilize same hardware with no exchange of information)	Yes
Available open interface (API) that enables RIS and/or MIS interface capabilities	Yes
DICOM Services	Store Query/retrieve Print management (only with 8 bit)
Import of images from CD/DVD	Yes, with PacsScan
Export of images to CD/DVD/USB flash drive	Yes
DICOM viewer for exported images	Requires PAGSGEAR Media Writer CD/DVD robot
DICOM DIR	Requires PAGSGEAR Media Writer CD/DVD robot
Make patient data anonymous	Yes
Print to paper	Yes

## IntelliSpace Breast Mammography

Hanging protocols	<ul style="list-style-type: none"> <li>• Predefined user hanging protocols</li> <li>• Customization of hanging protocol according to user preferences</li> <li>• Automatic detection of priors</li> <li>• Automatic hanging of priors (DR, CR, and digitized film)</li> <li>• Switching between priors with just one click</li> </ul>
Viewing tools	<ul style="list-style-type: none"> <li>• Window width/Window level</li> <li>• Inversion with background air suppression</li> <li>• Edge enhancement</li> <li>• CLAHE (contrast limited adaptive histogram equalization)</li> <li>• Pan</li> <li>• Zoom</li> <li>• Fit-to-window</li> <li>• True size (life size)</li> <li>• Step zoom with pixel to pixel resolution</li> <li>• Magnifying glass</li> <li>• Rotation and flipping of images</li> <li>• Region of Interest (circle, ellipse, freehand, point value)</li> <li>• Several choices of monitor layouts</li> <li>• Save image/window to clipboard or file (.jpeg, .bmp, .gif, .tif, .png)</li> </ul>
Measurements	<ul style="list-style-type: none"> <li>• Height</li> <li>• Width</li> <li>• Depth</li> <li>• Distance from skin</li> <li>• Distance from nipple</li> <li>• Distance from chest wall</li> </ul>
Show/hide measurement	Yes
Automatic breast tissue alignment for improved left and right comparison	Yes
Automatic breast fit-to-window for fast review	Yes
Automatic scaling of current and prior images	Yes
Mirrored linking of images for zooming and panning	Yes
Display of CAD marker	Yes
Ability to view a second case without closing current case in review	Yes
Tomo Viewing	Yes

# IntelliSpace Breast\* – Breast Ultrasound Review option

The Breast Ultrasound Review option combines mammography and ultrasound for a comprehensive and efficient review. It also adds the BI-RADS® reporting feature for enhanced workflow.

Workflow	
Schematic breast diagram to visually report and relate findings over the different modalities	Yes
BI-RADS® reporting on examination and finding level	Yes
Designated BI-RADS® reporting panel	Yes
Automatic compilation of structured reports according to BI-RADS® for efficient information sharing	Yes
Export of BI-RADS® report to PACS (SC, SR)	Yes
Automatic transfer of measurements into BI-RADS® report	Yes
Generating key images	Yes
Rendering of key images into the BI-RADS® report	Yes
Export of key images to PACS	Yes
Auto delete protection	Yes

Ultrasound	
Designated BI-RADS® reporting panel	Yes
Hanging protocols	<ul style="list-style-type: none"> <li>• Tiled view (6 images per page including scrolling through pages)</li> <li>• Run mode (enlarged images with scrolling option)</li> </ul>
2D color display	Yes
3D volume reconstruction, multi-planar reformats	Yes, for Philips Ultrasound only
Additional viewing tools	<ul style="list-style-type: none"> <li>• Zoom</li> <li>• Pan</li> </ul>
Measurements	<ul style="list-style-type: none"> <li>• Transversal size</li> <li>• Antero-posterior size</li> <li>• Cranio-caudal size</li> </ul>
Show/hide measurement	Yes

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# IntelliSpace Breast\* – Breast MRI Review option

The Breast MRI Review option is an addition to the Breast Ultrasound Review option. It adds the functionality of the breast diagnostic workstation with full MRI review functionality.

In addition to the previously mentioned functionality for mammography and ultrasound, the Breast MRI Review option adds the following:

MRI	
Designated BI-RADS® reporting panel	Yes
Automatic transfer of finding position in the breast diagram	Yes
Display of acquired sequences (original images)	Yes
3D volume rendering for MRI in color	Yes
Multi-Planar Reformat (MPR)	Yes
Navigation through single slices of volume	Yes
Linked navigation through slices of different MPRs	Yes
Navigation through dynamic time points	Yes
Choice of viewing subtracted or unsubtracted dynamics	Yes
Enlarged viewing of selected breast	Yes
Maximum Intensity Projection (MIP)	Yes
Prevention of overlap when focusing on one breast laterality	Yes
Link between the region of interest in the MIP and the corresponding slice in the MPR	Yes
Display of time intensity curves for the selected region of interest	Yes
Additional viewing tools	<ul style="list-style-type: none"> <li>• Window width/window level</li> <li>• Zoom</li> <li>• Pan</li> <li>• Switching between planes (sagittal, coronal, transversal)</li> <li>• Rolling</li> </ul>
Measurements	<ul style="list-style-type: none"> <li>• Antero-posterior size</li> <li>• Left-right size</li> <li>• Cranio-caudal size</li> <li>• Largest diameter</li> <li>• Distance from skin</li> <li>• Distance from nipple</li> <li>• Distance from chest wall</li> </ul>
Show/hide measurement	Yes



# Hardware

Server	
Vendor name	Dell®
System type	T320
Chassis	Tower 2.5" Chassis with up to 16 Hot Plug Hard Drives
Processor	Intel® Xeon® E5-2430 (15M Cache, 2.2 GHz, 7.2 GT/s, Intel® QPI, 6C, 95 W)
Memory configuration	8 GB (2x4 GB), 1333Mhz, RDIMM, low volt, Dual Rank, x8
CD-ROM/DVD	DVD +/- RW SATA, internal
Hard drives	8 x 500 GB near-line SAS (7.200 rpm) 2.5" hard drive Hot Plug
Images database size	2.6 TB
Operating system	Windows® Server 2008 R2 SP1 Standard Edition (English) Incl. 5 CALs

Client	
Vendor name	Dell
System type	Precision workstation T3600
Chassis	Mid-Tower
Processor	Intel® Xeon® E5-1620 (3.60 GHz, 10M Cache, 4C, 130 W)
Memory configuration	16 GB 1600 MHz, DDR3, ECC, RDIMM Memory (4x 4GB)
CD-ROM/DVD	8x DVD +/- RW Drive
Hard drive #1	250 GB 35" Serial ATA (7.2K rpm) Hard Drive (No RAID)
Operating system	English – Windows 7 ultimate x64 SP1



Mammography keypad

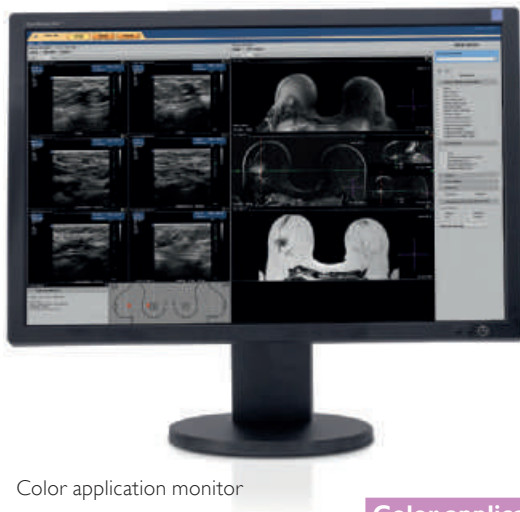
Mammography keypad	
USB keypad	Philips designed mammography keypad, backlight buttons Electrical interfacing is done via 1 standard USB-2 plug, cable length 1800 mm (70.9")
Mammography workspace provides a dedicated mammography keypad for quick access to often-used functions to enhance efficiency and comfort for the user.	<ul style="list-style-type: none"> <li>• One-key access to common tools and functions</li> <li>• Accommodates right and left handed users</li> <li>• The functionality includes simple navigation through cases, the essential tools for mammography review, status buttons for workflow management, and customizable keys</li> </ul>
Individual configurable keys for each user to improve speed	Yes, two keys on keypad are individually programmable





Navigation monitor

Navigation monitor	
Monitor	Dell UltraSharp U2312HM/black
Display type	Thin film transistor (TFT) active matrix liquid crystal display (LCD)
Panel type	e-IPS – In Plane Switching, Anti-glare with hard coat 3H
Size	23"
Dimensions (W x D x H)	546.4 x 185.4 x 365 – 493.9 mm (21.51" x 7.30" x 14.37 – 19.44")
Panel resolution	1920 x 1080 at 60 Hz
Contrast ratio	1000:1 (typical)
Brightness	300 cd/m <sup>2</sup> (typical)
Weight (standalone)	2.96 kg (6.53 lbs)
Weight (including packaging)	6.40 kg (14.11 lbs)
Power supply	Voltage Required: 100 to 240 VAC / 50 or 60 Hz + 3Hz / 1.5 A (Max)
Power consumption (Operational)	30 W (typical) / 70 W (maximum)
Supplied accessories	DVI – DVI cable; euro power cable; USB upstream cable



Color application monitor

Color application monitor	
Monitor	Dell UltraSharp U3011
Display type	Thin film transistor (TFT)
Panel type	e-IPS – In-plane Switching, anti glare
Size	30"
Dimensions (W x D x H)	481.3 mm (compressed) ~ 571.3 mm (extended) x 694.5 mm x 211.3 mm [18.95" (compressed) ~ 22.50" (extended) x 27.34" x 8.32"]
Panel resolution	2560 x 1600 at 60 Hz
Contrast ratio	1000: 1 (typical), Dynamic Contrast Ratio: 100,000:1 (Max)
Brightness	370 cd/m <sup>2</sup> (typical)
Weight (standalone)	9.3 kg (20.40 lbs)
Weight (including packaging)	15.3kg (33.76 lbs)
Power supply	AC input: AC 100 – 240 V, 50/60 Hz, 2.5 A
Power consumption	110 W (typical)/250W (maximum); < 2 W (stand by/sleep)
Supplied accessories	DVI – DVI dual link cable; euro power cable



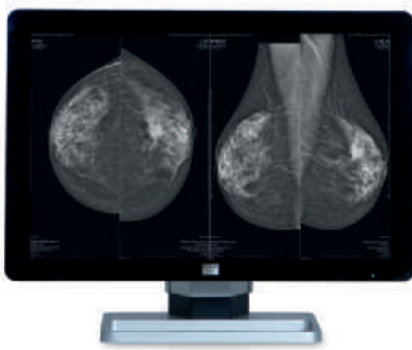
5MP Monitors

<b>5MP Monitors Mammography: Barco Nio (optional)</b>	
Display	Nio 5mp MDNG-6121
Display technology	TFT AM LCD Dual Domain IPS
Native resolution	2800 x 2100
Active screen diagonal	541 mm (21.3")
Active screen width	324 mm (12.8")
Active screen height	432 mm (17")
Pixel pitch (HxV)	0.154 mm
Maximum luminance	1100 cd/m <sup>2</sup>
Luminance calibrated	500 cd/m <sup>2</sup>
Luminance uniformity (typical)	<15% variation
Display adjustment control	Through QAWeb software or by OSD menu
Display controls	On/Off, OSD
Video signal input	DVI-D Dual Link
Display communication	DDC2Bi, USB 2.0
Sensor built-in	BLOS backlight sensor
Certifications and standards	UL 60601-1 1ST EDITION, CAN/ CSA-C22.2 NO. 601.1-M90, IEC 60601-1 2ND ED:1988 + A1:1991 + A2:1995, IEC 60950-1:2001 1ST EDITION, CE - 2004/108/EC, CE - 93/42/EC, A1:2007/47/EC CLASS IIB, DEMKO - EN 60601-1, CCC - GB9254-2008 + GB4943-2001 + GB17625.1-2003, BSMI - CNS13438(95) + CNS14336(94), KCC, VCCI, FCC class B, FDA 510K, Rohs
Operational temperature	0°C to + 35°C (32°F to 95°F)
Power consumption	95 W
Weight	12.3 kg (27.12 lbs)



5MP Monitors

<b>5MP Monitors Mammography: Barco Coronis (optional)</b>	
Display	MDMG-5121
Display technology	TFT AMLCD dual domain IPS Grayscale, 3 subpixels per pixel
Native resolution	2048 x 2560 pixels
Active screen diagonal	540.9 mm (21.3")
Active screen width	337.9 mm (13.3")
Active screen height	422.4 mm (16.6")
Pixel pitch	0.165 mm (0.0065")
Maximum luminance	1600 cd/m <sup>2</sup>
DICOM calibrated luminance	Factory default 600 cd/m <sup>2</sup>
Luminance uniformity	90% typical with PPU
Stabilization, calibration, and automated QA	Embedded I-Guard
Digital video input	DVI-D Dual Link
Display control and communication	DDC (complying to DDC2Bi)
Digital video/DDC input connector	One physical DVI connector, one cable
Display controls	Power on/off, backlight adjustments, OSD
Certifications and standards	UL 60601-1 1st Edition, CAN/CSA-C2.2 No. 601.1-M90, IEC 60601-1 2nd ED: 1988 + A1: 1991 + A2:1995, IEC 60950-1: 2001 1st Edition, CE-2004/108/EC, CE-93/42/EC, A1: 2007/47/EC, Class IIB, DEMKO-EN 60601-1, CCC-GB9254-2008 + GB 4943-2001 + GB 17625-1-2003, BSMI-CNS 13438 (95) + CNS14336 (94), KCC, VCCI, FCC class B, FDA 510K, RoHS
Operational temperature	0°C to + 35°C (32°F to 95°F)
Power supply	AC input: AC 90 – 264 V, 45 – 65 Hz
Power consumption	65 W (nominal)
Weight	13.5 kg (29.7 lb)



10MP Monitors

<b>10 MP Monitors Mammography: Barco Coronis Fusion (optional)</b>	
Display	Coronis Fusion
Display technology	TFT AM LCD Dual Domain IPS
Native resolution	Native 10 MP (4096 x 2560), configurable to 2 x 5 MP (2048 x 2560)
Active screen diagonal	762 mm (29.6")
Active screen width	403 mm (15.9")
Active screen height	432 mm (17")
Pixel pitch (H x V)	0.1575 mm
Maximum luminance	1250 cd/m <sup>2</sup>
Luminance calibrated	500 cd/m <sup>2</sup>
Video input signals	DVI-D Dual Link (2x)
Certifications and standards	CE0120 (MDD 93/42/EEC class IIb product), CE - 2004/108/EC, CE - 93/42/EEC; A1:2007/47/EC class II b, UL 60601-1 1ST EDITION, CAN/CSA-C22.2 NO. 601.1-M90:2005, IEC 60601-1 2ND ED:1988 + A1:1991 + A2:1995, IEC 60950-1:2005 2ND EDITION, DEMKO - EN 60601-1:1990 + A1:1993 + A2:1995, VCCI, FCC class B, BSMI, FDA 510K, RoHS, KC
Power consumption nominal	102 W
Weight	24.2 kg (53.6 lbs)

# Additional options

<b>Media Writer/CD-DVD Robot</b>	
Software	PACSGEAR Media Writer SW
Hardware	Primera Bravo SE
Media Writer is a software/hardware solution that offers fast, one-click burning from the IntelliSpace Breast. Burn DICOM studies and reports to CD/DVD or USB flash drives to create a portable image record.	
Burn time per disc	3 minutes
Number of empty CD/DVD to prevent manual loading	20
Viewer integrated to view studies and reports virtually anywhere	Yes
Built-in inkjet printer for accurate labels with customizable information	Yes

<b>DICOM pre-fetching</b>	
Software	PACSGEAR Sweeper
The Sweeper application provides an automated method for on-demand pre-fetching of previous studies based on upcoming patient schedules	
Overnight pre-fetching of priors based on DICOM modality worklist	Yes
Walk-in's – check off worklist updates	Yes
Configurable rules for pre-fetching of studies	Yes



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