



DROC

Digital Radiography Operator Console

Product Data

Operator Console

<i>The operator console provides a fully integrated front-end for every step of the examination procedure, including network connectivity for patient selection, exam configuration, anatomical programming, setting of exposure parameters, image acquisition, QA and post processing of acquired images, downstream network DICOM store and print connectivity.</i>	
Type	23.8" LED colour IPS diagnostic monitor with anti-glare surface
Resolution	1920x1080 pixel
View angles	178°/178°
Brightness	350 cd/m ²
Contrast	1000:1
Response time	6 ms
Pivot	90°(both clock wise and counter clockwise)
Features & Functions	Presence Sensor, Ambient Light Sensor
CPU	Intel® Core™ i7-8700K (6 core, 12 MB cache, 3.7 GHz, 4.70 GHz turbo, UHD graphics 630)
RAM	8 GB DDR4
Graphic card	NVIDIA Quadro P400, 2 GB, 3 mDP
Local storage	Hard disk capacity: 2 TB
	Image storage capacity: more than 28.000 images at full resolution
Operating system	Windows 10 Pro (64 bit)
Image size	Up to 15 MB depending on the exam type, without any compression
Patient data input	Keyboard, HIS/RIS connection
Image preview time	1.5 s
Final image time	≤ 5 s with at least 75% Wi-Fi signal
	≤ 7 s with at least 50% Wi-Fi signal
Cycle time	The system is ready to acquire after the display of the previous image



<p>Exam preparation and image acquisition features</p>	<p>The console has been designed to maximize the examination workflow by providing an intuitive graphical user interface with fully integrated provisions for:</p> <ul style="list-style-type: none"> - Automatic data input from RIS/HIS via DICOM Modality Worklist query* - Manual input of patient data, emergency patient registration - Automatic selection of exam procedure based on Worklist* - Programmable X-ray technique factors for each exam, including APR program** and AEC settings** with manual override capability - "Exam coach": step-by-step graphic exam setup with programmable automated workflow and thumbnail icons based on the atlas of radiographic positions - Pre-exposure display of patient and procedure information, X-ray generator exposure factors**, status and control functions integrated in a single display screen - Post-exposure display of actual exposure parameters** and acquired thumbnail images - Dose per area product reading is displayed on the workstation monitor and is automatically burned in the DICOM header (if the generator is connected to a DAP camera) ** <p>* these functions are subject to availability and compatibility of exam data on the RIS/HIS network ** only with the compatible generators</p>
<p>Image processing features</p>	<p>The following post-processing features can be applied to the acquired images:</p> <ul style="list-style-type: none"> - Insertion of markers and comments (predefined or free text) on the image - Pan and zoom - Full size image display - 90° image rotation clockwise or anti-clockwise - Horizontal and vertical flip of the image - Automatic image cropping to collimated area - Manual image cropping - Image rotation through a user-selected angle - Insertion of a mask to display only a part of the image - Image greyscale inversion



	<ul style="list-style-type: none"> - Restore to initial image - Acceptance or rejection of the image - Display of the grey level histogram, with manual adjustment of the curve, contrast and brightness values - Application of grid suppression algorithm - Choice between two different image processing algorithms: LUT or Symphony. LUT algorithm controls the minimum and maximum densities used in the printed or displayed image, with the possibility to customize the default settings for each procedure when the system is installed. Symphony applies an advanced image processing according to the examined anatomy, with customization of processing parameters (grey level amplification, grey level equalization, detail enhancement, noise reduction), enhancing the visualization of low contrast structures such as tissue and vessels, while maintaining and enhancing the visibility of high contrast structures such as bones. - Mosaic display up to 16 images - Annotation - Measurement of distances, angles, rectangular and elliptical areas
Rejected images management	“Statistic” window dedicated to search and display of exams with rejected images
Image hardcopy	<p>The Print Layout Editor allows to:</p> <ul style="list-style-type: none"> - Select different printing formats - Print up to 16 images on one film, according to printer capability (multiple image printing) - Print zoomed images - Print patient and examination data within the acquired images (customizable during the installation phase)
Connectivity	System can be connected to DICOM-compatible devices through Ethernet port. Capable of sending images to multiple destinations at the same time.
Supported DICOM Classes	<ul style="list-style-type: none"> - Print (SCU) - Storage (SCU) - Storage Commitment (SCU)



	<ul style="list-style-type: none"> - Modality Worklist (SCU) - MPPS (SCU) - Dose SR (SCU) - Query/Retrieve (SCU) (to be enabled during the installation)
Media device	The workstation is equipped with a CD/DVD burner to export acquired images in DICOM format or in other formats (jpg, bmp, tiff).
DICOM output	12 bits (4096 grey levels)
Remote access	Remote access capability for troubleshooting
Data safety and privacy	The system is equipped with multiple-level password protected access to preserve the patient's data integrity and privacy
Note	All the above mentioned features are subject to verification of hardware and software compatibility of the devices to be connected.

Electrical features

Power supply (computer)	100-240 Vac, 875 W, 50/60 Hz
Absorbed current (computer)	4,62 A
Power supply (synchronizer)	24 dc
Absorbed current (synchronizer)	0,5 A
UPS	900 VA (max absorbed power by VDX workstation)

Mechanical features

<i>Item</i>	<i>Height</i>	<i>Depth</i>	<i>Width</i>	<i>Weight</i>
Computer	335 mm (13.18")	345 mm (13.58")	176.6 mm (6.95")	8.92 kg (19.6 lb)
UPS	250 mm (9.84")	382 mm (15.04")	100 mm (3.94")	10.72 kg (23.66 lb)
Synchronizer	60 mm (2.36")	280 mm (11.02")	320 mm (12.6")	15 kg (33.1 lb)

DROC cabinet (holds computer, synchronizer, UPS and electrical material)

Height	500 mm (19.69")
Depth	450 mm (17.72")
Width	420 mm (16.55")
Weight	21 kg (46.36 lb)



(DROC cabinet)



Environmental conditions

Operating conditions	Temperature:	from +10° to +35°C (from 50° to 95° F)
	Relative humidity:	from 30% to 70%, non-condensing
	Pressure:	from 80 to 125 kPa
Conditions for transport and storage	Temperature:	from -10° to +55°C (from 14° to 131° F)
	Relative humidity:	from 10% to 90%, non-condensing
	Pressure:	from 70 to 125 kPa

Standards and regulations

	CE symbol grants the product compliance to the European Directive for Medical Devices 93/42/EEC and its revised versions
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Note: Products are continuously under review in the light of technical advancement. The actual specification may therefore be subject to improvement or modification without notice.

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Company with Quality System certified by



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