

# **Digital X-Ray Imaging Products**

to cover all the needs of Radiologists / X-Ray Departments in Hospitals



The COLENTA DX Easy Imaging DR Retrofit Kits (Hardware/Software), cost effectively converts Film or CR based Radiography into high quality Digital X-Ray Imaging for general radiographic applications.

# **DX Easy Imaging X-AQS**

Computer Hardware and Image Acquisition and Processing Software





# **DX Easy Imaging**

Wireless Flat Panel Detector with AED\* - Facility
\*) Automatic Exposure Detection

For further details please visit our homepage <u>www.colenta.at</u>!

COLENTA Labortechnik GmbH & Co. KG

Neunkirchner Str. 117, A-2700 Wiener Neustadt, Austria

Tel.: +43(0)2622-28311-0 E-Mail: office@colenta.at



Colenta is an ISO 9001 / ISO 13485 certified company



### **COLENTA AED Flat Panel Detector**

DX Easy Imaging uses the latest State of The Art direct X-Ray sensitive, portable, Flat Panel Detector 14"x17"/ 17"x17" with spatial resolution of 3.3 lp/mm to ensure superior image quality by meeting all requirements in high standard general purpose diagnosis.

The battery equipped Flat Panel Detector with AED-facility, fits into existing X-Ray tables or wall stands (like film cassettes or CR plates), with wireless connection to the computer and has no need of an interlink to the X-Ray generator. Permanent charging with backup cable with a magnetic charging connector is possible.

#### **COLENTA AED Flat Panel Detector - Features & Benefits**

- ✓ Use with existing X-Ray equipment
- ✓ Slim and light-weight design, approx. 3 kg
- ✓ Same dimensions as 14"x17"/17"x17" film cassette/CR panel
- Attachable tethered cable (optional) for Image Acquisition and Transmission through Gigabit Ethernet interface
- ✓ Brilliant Modulation Transfer Function (MTF)
- ✓ Automatic Exposure Detection AED, no need for interface to X-Ray generator
- √ 14 bit signal digitalization provides Wide Dynamic Range
- ✓ Communication through WLAN (IEEE 802.11n)
- ✓ Image acquisition and transfer time in approx.. 3 seconds
- ✓ Fully compatible with DICOM 3.0<sup>1)</sup> standard
- ✓ Reduced X-Ray dose for patient safety
- ✓ Interchangeable, rechargeable panel battery

## **Multipanel Mode**



It is feasible to use 2 Panels with one console with our DX Easy Image Software.

So it is possible to operate one Panel in the stand and the second on/in the table.

### Plug and Play Power and Data Switching



With the flexible design of our Panels it is possible to switch between different operation modes by plug and play. Simply unplug the TCP/IP Data cable to use the panel wireless and vice versa without a need of a new configuration of the device. A magnetic connector for the power plug ensures easy online switching between line operation and battery operation. This enables a fast change between fixed place and mobile mode operation of the panel.

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<sup>&</sup>lt;sup>1</sup> DICOM Digital Imaging and COmmunications in Medicine Document: d4-6\_8 - flyer x-ray en.docx

## **DX Easy Imaging X-AQS Software:**

The Image Processing Software X-AQS is fully DICOM 3.0 compatible, providing image data transfer to any DICOM device, PACS or RIS, for efficient data management, printing, archiving and remote image viewing.

Fast network distribution – images can be automatically sent to other viewing stations, printers and archive servers – results in an efficient workflow leading to less wait time for patients and a higher patient throughput.

The Image Processing Software X-AQS provides consistent and excellent image quality, using optimized algorithms for each different body part, allowing various pre-set image processing modes for different studies, at considerably reduced X-Ray dose.



- ✓ Patient Registration: Manually or DICOM Modality Worklist
- ✓ Image Acquisition + QC Tools
- ✓ Image preview in 3 Seconds
- ✓ DICOM Store/Transfer to PACS
- ✓ DICOM print to DICOM printer or "Print to Printer" for paper printer
- ✓ Export images formatted as .jpg, .tiff, bmp, and DICOM (with or without Viewer) to CD or other media

- ✓ Archive to CD/DVD
- Preconfigured with default anatomical exam tree and image processing parameters
- √ Black surround fill Delete image
- ✓ Stitching manually and automatically
- ✓ Exposure Index
- ✓ available in several languages
- ✓ Patient DVD with viewer

## **Image Viewer Functions:**

Zoom



Rotation and Mirror



(turn to the left, flip, turn to the right, mirror)

# Measurement and Annotation



(Angle, Outline Distance, Add Text)

# Window levelling



(Gradation brightness, contrast and gamma value Contrast inversion)

## Radiography Marker



(Left / Right markers)

# Organ-specific filters



with individual gradation settings

# DX Easy Imaging DR Retrofit Kit PE 1417/PE 1717, WL/W Specifications

**Technology** Flat Panel Detector, Amorphous Silicon

Scintillator Csl (Directly Deposit)

**Active area** 14" x 17"(PE 1417), 17" x 17" (PE 1717)

Resolution2.304 x 2.800 Pixel (PE 1417), 3.072 x 3.072 Pixel (PE 1717),Pixel pitch150 μm x 150 μm (PE 1417), 139 μm x 139 μm (PE 1717)

**Grayscale** 14 Bit (16.383)

Image acquisition time $\leq$  5s (PE 1417),  $\leq$  7s (PE 1717)Method of Exposure (trigger)DR Trigger / i-Sync 2(AED)

wired Ethernet / WIFI (wireless communication)

Wireless Mode 2.4G / 5G, with internal AP

Internal Image Storage 200 full size images

Battery Operating Time > 4 hours (PE 1417), > 2 hours (PE 1717)

Battery charging time empty to full approx. 2 hours

Water Proof IPX1 (PE 1417), IPX0 (PE 1717)

**Drop Monitoring** Realtime

Image transfer

Limiting Resolution 3.3 lp/mm (PE 1417), 3.4 lp/mm (PE 1717)

Dimensions 384mm (H) x 460mm (V) x 15.2 (D) mm (PE 1417) 460mm (H) x 460mm (V) x 15.2 (D) mm (PE 1717)

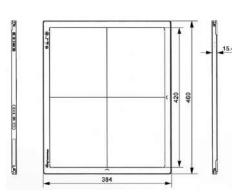
Power Consumption 13W

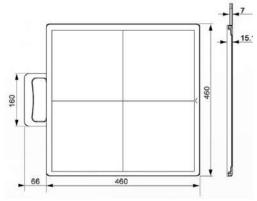
Adapter AC input 110~240V, 50~60Hz

**Weight** 3.7 kg (8.16 lbs), PE 1417 – 4.7 kg (10.36 lbs), PE 1717

Operating Environment +5 °C to +30 °C; 45 % to 85 % noncondensing humidity
Storage and transport -10 °C to +40 °C; 45 % to 85 % noncondensing humidity
Capture console, consisting of Capture Workstation with a Touch Screen Monitor,

X-AQS DX Easy Imaging Software, Charging dock





Software controls detector, image acquisition and optimization, connects dose area product measurement device. Optional with fully integrated DX Easy Imaging X-AQS PACS solution.

#### Minimum Hardware Requirements for a Colenta DX Easy Imaging Capture Console:

- Operating system Windows 8.1 64Bit (not Windows 8/10)
- Processor min. Intel Core i5
- Min. 8 GB Memory
- 320GB SSD + HDD SATA 1TB
- 2 x Intel GBit LAN controller
- Intel VGA graphic controller with 24 bit color depth
   Video Mode of graphic card supports OpenGL-Version 1.1
- Min. Screen resolution 1024x768 pixel
- CD/DVD-writer, Keyboard and mouse



Specifications are subject to change without notice. All brand names or trademarks are the property of their respective owners. In some countries, regulatory approval may be required to import medical devices.