

## **Digital X-Ray Imaging Products**

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

# DX — EASY IMAGING

The COLENTA DX Easy Imaging DR Retrofit Kit (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 www.colenta.at

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Colenta is an ISO 9001 / ISO 13485 certified company



#### **COLENTA AED Wireless/Wired Flat Panel Detector**

The COLENTA DX Easy Imaging DR Retrofit Kit uses the latest State of The Art direct X-Ray sensitive, portable, Flat Panel Detector 14"x17"/ 17"x17" with spatial resolution from 3.3 lpm to ensure superior image quality by matching 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. 3,43 kg or 4,3kg
- ✓ Same dimensions as 14"x17"/17"x17" film cassette/CR cassette
- 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
- ✓ Up to 16 bits signal digitalization provides Wide Dynamic Range
- ✓ Communication through WLAN (IEEE 802.11a/b/g/n/ac))
- ✓ 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

#### **Dual-panel Mode**



2 Flat Panel Detectors are used with only one console by our COLENTA DX Easy Imaging Software.

Then, it is possible to operate one FPD in the stand and the other one on/in the table.

#### Plug and Play Power and Data Switching



With the flexible design of our FPD 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.

<sup>&</sup>lt;sup>1</sup> DICOM Digital Imaging and COmmunications in Medicine Document: d4-6\_10- flyer x-ray en

#### **COLENTA DX Easy Imaging Software:**

The X-AQS DX Easy Imaging Software 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 waiting time for patients and to an higher patient throughput.

The X-AQS Image Processing Software 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.



#### **Image Processing Software**

- 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:**



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 1417/1717 - WL

### **Specifications**

**Technology** Scintillator Active area Resolution Pixel pitch Grayscale

Image acquisition time Method of Exposure (trigger)

Image transfer Wireless Mode Internal Image Storage **Battery Operating Time** 

Battery charging time empty to full

Water Proof **Drop Monitoring Limiting Resolution** 

DQE @ 1.0 LP/mm(2.5uGy)

**Dimensions** 

**Power Consumption** 

Adapter Weight

**Operating Environment (1717)** Operating Environment (1417) Storage and transport (1717) Storage and transport (1417) Capture console, consisting of Flat Panel Detector, Amorphous Silicon

CsI (Directly Deposit)

14" x 17"(Panel 1417), 17" x 17" (Panel 1717)

2.304 x 2.800 Pixel (1417), 3.072 x 3.072 Pixel (1717), 150 μm x 150 μm (1417), 139 μm x 139 μm (1717)

16 Bit (65.536) - Panel 1417, 16 Bit (65.536) - Panel 1717

 $\leq$  5s (1417),  $\leq$  5s (1717) DR Trigger / i-Sync 2 (AED)

wired Ethernet / WIFI (wireless communication)

2.4G / 5G, with internal AP

200 full size images

 $\geq$  5 hours (1417),  $\geq$  5 hours (1717)

approx. 2.5 hours

IPX1 (1417), IPX1 (1717)

Realtime

3.3 lp/mm (1417), 3.6 lp/mm 1717)

49%

384mm (H) x 460mm (V) x 15.1 (D) mm (1417)

460mm (H) x 460mm (V) x 15.1 (D) mm (1717)

max. 18W (1417), max. 20W (1717) AC input 110~240V, 50~60Hz

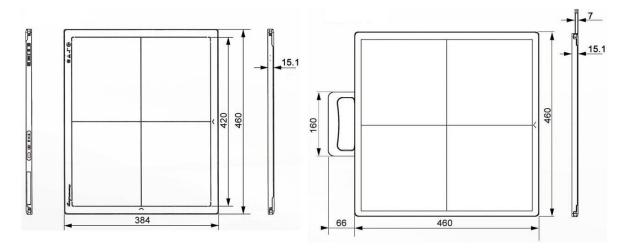
3.43 kg (8.16 lbs), Panel 1417 - 4.3 kg (10.36 lbs), Panel 1717

+5 °C to +35 °C; 10 % to 90 % (Non-Condensing) +5 °C to +35 °C; 10 % to 90 % (Non-Condensing)

-20 °C to +55 °C; 5 % to 95 % (Non-Condensing)

-20 °C to +55 °C; 5 % to 95 % (Non-Condensing)

Capture Workstation with a Touch Screen Monitor, X-AQS DX Easy Imaging Software, Charging dock



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

- Operating system Windows 10 IoT
- Processor min. Intel Core i5
- Min. 8 GB Memory
- 250GB SSD + HDD SATA 1TB
- 2 x GBit LAN controller
- CD/DVD-writer, USB keyboard and USB mouse

