EOS is an imaging device which combines the use of a Nobel Prize-winning particle detector and an innovative linear scanning technique. With these two technologies, EOS enables whole body frontal and lateral images to be acquired simultaneously for a standing or seated patient, with a reduction in the dose of 50% compared to a DR system and up to 85% compared to a CR system, with equal or superior image quality.

In less than 20 seconds, two full-body digital radiographs are taken, without image stitching or any cassette to handle: EOS is a real time-saver for patients and operators.

**Specifications**

**2D imaging**
- Significant exposure dose reduction compared to Computed Radiography or Digital Radiography
- Micro Dose option, for follow-up measurements in pediatrics, with dose equivalent to a week's natural radiation exposure
- Exceptional image quality
- Simultaneous acquisition of frontal and lateral images
- Continuous image (no “stitching”) and true size (no magnification)
- Acquisition of full body or localized images of a seated or standing patient
- Total exam cycle time of around 4 minutes for a complete frontal and lateral spine examination

**Detectors**
- 2 linear detectors, Nobel prize-winning AGD technology
- Number of pixels/line: 1764/line, Pixel size: 254 µm
- Pixel depth: 16 bits (> 65,000 grey levels)
- Typical Dynamic Range: > 90dB

**Tubes**
- Two X-ray tubes, maximum power 42 kW
- Small or large focal spot (0.4 x 0.7mm / 0.6 x 1.3mm)
- Aluminum (1 mm) or Copper (0.1 mm) filtration

**Acquisition software**
- Patient information management compatible with DICOM 3.0 standard (Modality Worklist SCU)
- Selection of area of interest (height and width) and acquisition mode (biplane, frontal or lateral)
- Selection of morphotype and anatomical region
- Adjustment of kV, mA and acquisition speed (auto/manual)
- Display of radiation exposure dose (mGy/cm²)
- Image display and processing tools (windowing, zoom, measurements, secondary captures, annotations)
- Contrast enhancement (smooth, standard, strong) and specific processing if there is a prosthesis present, available at acquisition or during post-processing. The types of default processing and contrast enhancement are set up during applications training
- Image print SCU and print true size
- Archive on DICOM 3.0 PACS (Verification service and Image Storage SCU & SCP, Query Retrieve SCU, storage commitment SCU)
- Statistical tool for analyzing the number of rejected or repeated images (RRA)
- Automatic generation and sending of reports on the dose accumulated during the examination:
  - RDSR (Radiation Dose Structured Report)
  - MPPS (Modality Performed Procedure Step)

**Dimensions**
- External dimensions: 2 m (l) x 2 m (w) x 2.7 m (h)
  6.6 ft (l) x 6.6 ft (w) x 8.9 ft (h)
- Internal dimensions: 76 cm (l) x 76 cm (w) x 254 cm (h)/
  29.9 in (l) x 29.9 in (w) x 100 in (h)
- Width of patient access: 46 cm / 18.1 in
Accessories delivered with EOS system

Platform with footstep
- Removable platform including fixation support, a platform and a footstep
- Patient raised by: 30 cm / 11.8 in

Patient stabilization
- Stabilization bar: enables the stabilization of the patient for acquisitions of the lower limbs in AP
- Posture stabilization device: enables the stabilization of the patient using a pressure pad applied to the head for AP and PA examinations of the spine and the full body

Quality control accessories
- Equipment used for the Quality Control procedure provided by EOS imaging in accordance with the regulations in force

Microphone
- Microphone and loudspeaker to communicate with the patient in the cabin

Options

Micro Dose
- Indicated for pediatrics imaging with patient entrance dose of 10 to 90 µGy
- For the purpose of follow-up patient measurements in pediatrics (lower limb deformities, scoliosis angle trending...)
- Available for 3 anatomical regions: full spine, lower limbs, full body

Laser positioning system
- A laser positioning system is available as an option on customer request in order to expedite the definition of top and bottom limits of the scanning area by using two independent laser lines projected on a patient’s skin
- This option comes in addition to the external metric scale and preview scan setting tools offered in the EOS system for the definition of the scanning area

EC conformity assessment: LNE/G-MED CE0459, Class IIb. For USA - Caution: Federal law restricts this device to sale by or on the order of a physician.


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