**Detector Sizes and Applications:** 20 x 22 cm and 31 x 31 cm Flat Panel Detectors

Interventional Vascular, Cardiovascular, Mobile c -arm, Image guided surgical c-arm system, and cone beam CT.

## **IMAGING PERFORMANCE**

Pixel Size: 150 microns

Pixel Depth: 14 bit on board ADC

Binning Modes: 1x1, 2 x 2, 3 x 3

Total Pixels (15x 15): Active Area:

15 cm x 15cm

1548 x 1548 1548 pixels

Total Pixels (20 x 22): Active Area:

20 cm x 22 cm

2064 x 2236 Pixels

1032 x 1118 2 x 2 binning

Total Pixels (31 x 31): Active Area:

31 cm x 31 cm

3096 x 3096 Pixels Center ROI Active Area:

20 cm x 20 cm

2048 x 2048 cm (1 x 1)

1024 x 1024 cm (2 x 2)

X-Ray Conversion Layer600 microns Csl

Saturation Level: 450 KE-in High Gain

2.2 Me in Low Gain

Pixel Gain: 4.3 uV/e in High Gain

1 uV/e in Low Gain

Readout Noise: 4.7 LSB

3.1 LSB

Dynamic Range: 71 dB

75 dB

Dark Current: ~8000 e/s/pixel

Fill Factor: >70%

>70% at 0.5 lp/mm DQE:

**MAXIMUM FRAME RATES:** 

15 x 15 cm Flat Panel Detector

Full Resolution:

Fiber Interface (30 fps)

Dual Cat 5 (30fps), cat 5 (24 fps)

Camera Link (30 fps) 3 x 3 binning (1k x 1k resolution)

**20 X 22 CM FLAT PANEL DETECTOR** 

Full Resolution:

Fiber Interface (30fps)

Dual Cat 5 (30 fps), cat 5 (18 fps)

Camera Link (22.5 fps) 2 x2 binning (1k x1k resolution)

31 X 31 CM FLAT PANEL DETECTOR

Full Resolution:

Fiber Interface (30 fps)

Dual Cat 5 (24 fps), cat 5 (12.5 fps)

Camera Link (15 fps)

2 x 2 binning or Center ROI 1 x 1 binning

**PHYSICAL DIMENSIONS:** 

36.4 cm x 39.4 cm x 4.65cm

**DETECTOR INTERFACES:** 

The Flat Panel Detector Interfaces to OEM supplied

Image Acquisition Systems using Cat 5 GigE Vision,

Fiber, or Camera Link Interfaces

Fully Integrated with the MX 200e /MX 300e Image

**Acquisition Systems** 

Custom Detector Interfaces for OEM customers

Command Processor Compatible Mode

X-RAY GENERATOR INTERFACE

Automatic triggering by Automatic Exposure Sensing

X-Ray trigger output. TTL (0-3V)

Custom X-Ray Generator Interfaces for OEM customers

**REGULATORY:** 

CE Mark according to Medical Device Directive



1.888.561.7900 | 1.407.438.7847 AmberUSA.com

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- Interconnection Hardware and Interface For Existing Wiring
  - Uses existing wiring
    No additional wiring neccessary
- Maintains Existing Controls and Operational Procedures
   No Retraining Required
- Weight Compensated For Balance No Adjustments Required
- Compatible Timings And Format For Use Of Existing Image Processor
- Preserves Automatic Generator
   Control Such As Auto Brightness Control

- CMOS sensor imaging technology
- Low noise
- High DQE
- High gain mode for Fluoroscopy Exposure Levels
- Low gain mode for Radiographic and Serial Radiographic Imaging
- Automatic Exposure Sensing
   Used for Automatic Exposure Control
   External trigger for Image Acquisition
- X-Ray Generator Synchronization (X-ray Exposure Trigger Output)
- Absence of Image Lag, Ghosting and other Artifacts
- Maximum Frame Rate at Full Resolution
- Smart Detector Option to perform Gain, Offset, and Pixel Correction
- Complete Integration with MX 200e/MX 300e Image Acquisition Systems
- GigE, Fiber, or Camera Link Interface