Fast, Low Dose X-ray Imaging

Overview
The PerkinElmer Dexela 1313 Flat Panel X-ray Detector is a high speed, low noise detector with excellent sensitivity and image quality. It employs innovative rad hard CMOS image sensor technology and is supplied with a choice of GigE Vision and Camera Link interfaces. The novel pixel design allows the detector to be used in 50 µm or 100 µm modes without degrading the image quality. A high speed region of interest mode permits high quality dental panoramic and CT imaging to be performed with the same detector. The detector has an on-board real-time image correction engine to output corrected images through the data interface.

We have over 20 years of experience partnering with OEMs integrating FPDs into demanding X-ray applications and can customize our product to meet your specific requirements. Let our digital imaging expertise work for you.
### DEXELA 1313 (In Development)

#### Sensor
- **Pixel Size (µm)**: Dual 50 and 100
- **Sensitive Area (mm²)**: 130.0 × 130.0
- **Pixel Matrix (px)**: 2600 × 2600 / 1300 × 1300
- **Max Frame Rate (fps)**:
  | 50 µm Pixel | 7 | 15 |
  | 100 µm Pixel | 26 | 40 |
  | 100 µm 8 mm pan strip | 200 | 200 |

#### Power
- **Dissipation**: TBD

#### Scintillator Options
- High Efficiency CsI
- High Resolution CsI
- High Resolution Gd₂O₂S:TB (GOS)

#### Environmental
- **Operating Temp**: +10 °C to + 40 °C
- **Storage Temp**: -10 °C to + 50 °C

#### Accessories
- **GigE Camera Link**
- **Power Supply**: 24 VDC
- **Intel® PRO EPIX EB1 1000/PT**

#### Mechanical
- **Weight (kg)**: 3
- **Dimensions (mm³)**: 206.2 × 161.4 × 42.0

#### Communications
- GigE Vision: 1000 Base T
- Sync In Port: 3 - 15 V
- Sync Out Port: TTL (0 - 5.0 V)
- Software: Support for 32 and 64 bit Windows® OS

#### Image Performance
- **Dynamic Range (dB)**:
  - 50 µm mode: typ. 66
  - 100 µm mode: typ. 67
- **X-ray Energy Range (kV)**: 12 - 450

#### Mechanical Characteristics (Dimensions in mm)

1: Unless otherwise specified, PerkinElmer Flat Panel X-ray Detectors are components intended to be integrated into products by X-ray system manufacturers. System manufacturers are responsible for qualifying and validating their products for their intended uses and meeting all applicable regulatory requirements.

Contents in this document are subject to change without notice.