OVERVIEW
Varex Imaging’s 2315N CMOS Flat Panel X-ray Detector (FPD) is a high speed, low noise X-ray detector with excellent sensitivity. It employs state-of-the-art large-area CMOS (Complementary Metal-Oxide Semiconductor) image sensor technology and is supplied with a range of scintillator and interface options.

Varex Imaging’s 2315N Flat Panel X-ray Detector has switchable pixel gain that makes it well suited to real-time imaging and CT as well as static imaging with high dynamic range.

FEATURES AND BENEFITS
• 74.8 µm pixel pitch
• 3072 x 1944 pixel matrix
• High Sensitivity and High Dynamic Range modes
• Operation up to 160 kV
• Suitable for real-time imaging at up to 86 fps
• 1 x 1, 2 x 2 and 4 x 4 pixel binning options
• High DQE
• Various scintillator options available
• Input/output for X-ray generator synchronization
• Camera Link data connection
• Superior Image Quality with High Resolution for Non-Destructive Testing

APPLICATIONS
• Electronics inspection
• Casting inspection
• Weld inspection
• Metrology
• Micro Cone BeamComputed Tomography
• Materials science
• Quality control in automotive, aerospace and electronics manufacturing
**Technical Specifications**

### SENSOR
- **Pixel Size (µm)**: 74.8
- **Sensitive Area (mm²)**: 229.8 × 145.4
- **Pixel Matrix (px)**: 3072 × 1944

### MAX FRAME RATE (FPS)

<table>
<thead>
<tr>
<th>Pixel Binning</th>
<th>Camera Link</th>
</tr>
</thead>
<tbody>
<tr>
<td>1×1</td>
<td>26</td>
</tr>
<tr>
<td>2×2</td>
<td>70</td>
</tr>
<tr>
<td>4×4</td>
<td>86</td>
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</tbody>
</table>

### IMAGE PERFORMANCE
- **Dynamic Range (dB)**
  - **High Dynamic Range Mode**: typ. 73
  - **High Sensitivity Mode**: typ. 69
- **X-ray Energy Range (kV)**: 12 - 160

### MECHANICAL
- **Weight (kg)**: 8
- **Dimensions l × w × h (mm³)**: 267 × 257 × 51

### MECHANICAL CHARACTERISTICS

(Dimensions in mm)

**COMMUNICATIONS**
- **Camera Link**: Medium 80 MHz (2 cables)
- **Control Channel**: 115 kBaud serial link / Camera Link
- **Digital Output**: 14-bit
- **Sync Ports**: BNC
- **Sync In Port**: 3 - 15 V edge or level trigger
- **Sync Out Port**: 2 x TTL (0 - 3.3 V-CL)
- **Software**: Support for 32 and 64 bit Windows® OS

### POWER
- **Dissipation**: 18 W

### SCINTILLATOR OPTIONS
- **DRZ Standard**: High Efficiency microcolumnar CsI

### TEMPERATURE RANGE
- **Operating Temperature**: +10°C to +40°C
- **Storage Temperature**: -10°C to +50°C

### ACCESSORIES
- **Power Supply Type**: 6V PSU
- **Power Cable**: 3 m XLR to D-Sub
- **Power Supply Input**: 50 - 60 Hz, 100-240 VAC
- **Power Supply Output**: 6 V
- **Network Interface Card**: EPIX E4 or E8

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Unless otherwise specified, Varex Imaging 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.