2315N CMOS
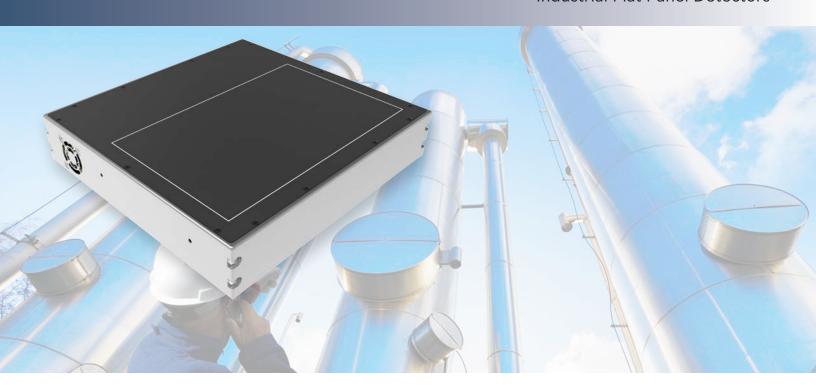### Industrial Flat Panel Detectors

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
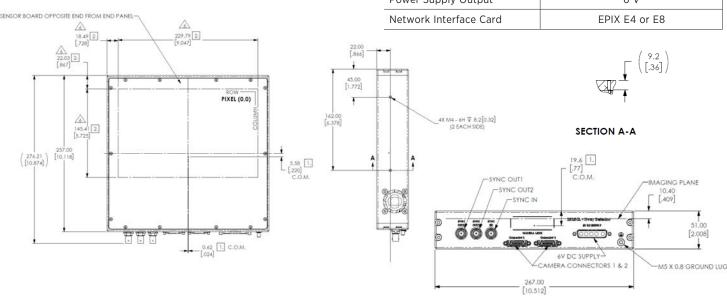
APPLICATIONS

- Electronics inspection
- Casting inspection
- Weld inspection
- Metrology
- Micro Cone Beam Computed Tomography
- Materials science
- Quality control in automotive, aerospace and electronics manufacturing

SENSOR

Pixel Size (μm)	74.8
Sensitive Area (mm²)	229.8 × 145.4
Pixel Matrix (px)	3072 × 1944

MAX FRAME RATE (FPS)

Pixel Binning	Camera Link
1×1	26
2×2	70
4×4	86

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

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

High Efficiency microcolumnar CsI
DRZ Standard

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

MECHANICAL CHARACTERISTICS

(Dimensions in mm)

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