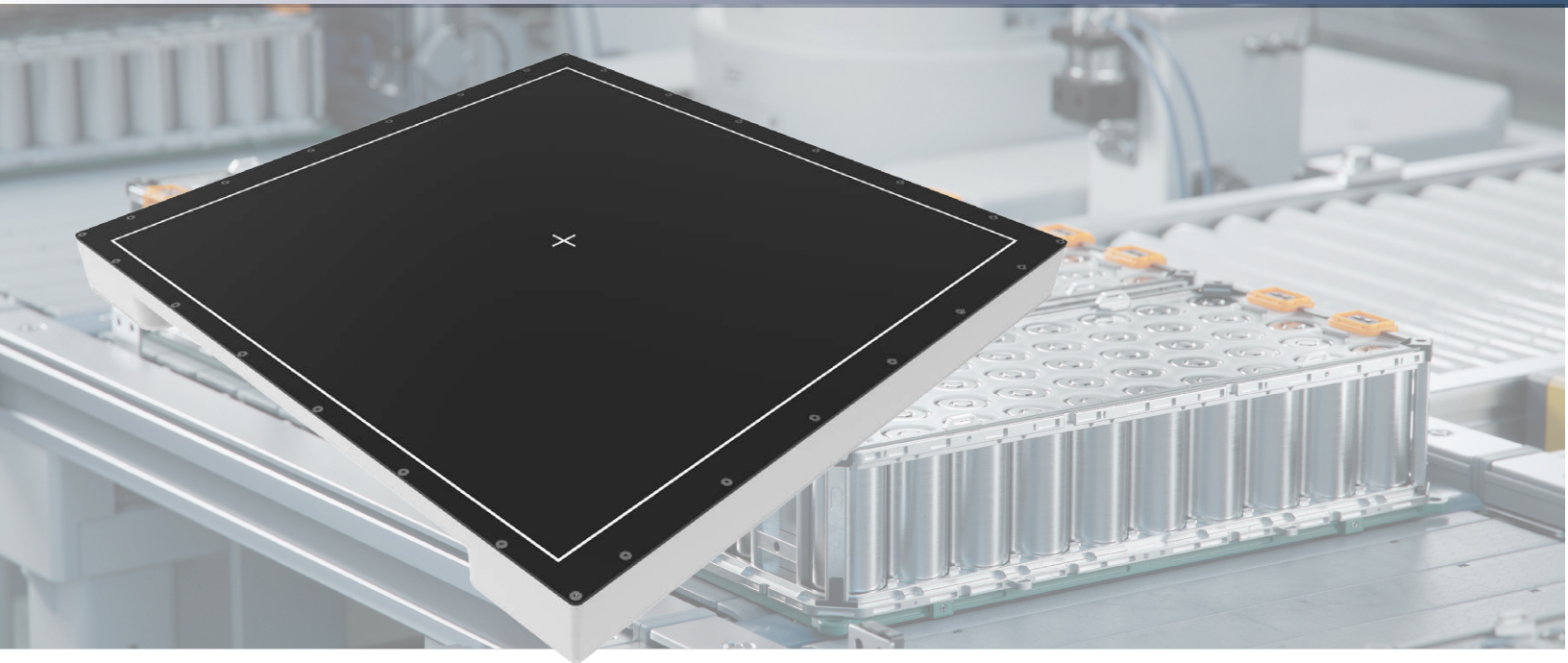


Making the Invisible Visible

Azure 3131N-I

Flat Panel Detector



OVERVIEW

Varex Imaging's Azure 3131N-I is a high speed, large area amorphous silicon Flat Panel X-ray detector for industrial applications.

The Azure 3131N-I supports a full 31 x 31 cm² field of view for non-destructive testing, using energies up to 225 kV. This detector has a 100 µm native pixel pitch and operates at 30 fps at full resolution and full field of view; it also supports different binning options and programmable field of views.

Rapid system integration is accomplished with integrated trigger and X-ray synchronization, on-board real-time image-processing and a comprehensive software library for image acquisition and processing.

FEATURES AND BENEFITS

- High resolution with high speed
- 30 fps @ 100 µm
- Programmable ROI
- Designed for 24/7 Applications
- Ultra high sensitivity
- Up to 225 kV
- Real time corrections

APPLICATIONS¹

- Inline Battery Inspection
- Cone Beam Computed Tomography
- Metrology
- Scientific Applications

Azure 3131N-I allows for frame rates up to 30 fps for smoother motion at full resolution.

Panel.....	Amorphous silicon
Scintillator.....	CsI: TI
Pixel Size.....	100 μ m pitch
Pixel Matrix.....	3072 $\times$ 3072
Pixel Pitch.....	100 μ m x 100 μ m
Frame Rate	
Full Resolution.....	30 fps
Binning 2x2.....	60 fps
<i>(Additional binning and programmable read-out modes are available.)</i>	

Active Area (Total)..... 307 mm x 307 mm
ADC..... 16-bit
Charger Amplifier..... Low noise ASICs
with selectable gains

Data I/F..... 10G Ethernet
Software..... 64 bit Windows®/Linux OS
Size.....347 mm x 337 mm x 31 mm
Weight..... 9 kg

The data in this document is for reference only.

A 3D radar chart comparing five methods: iSRBdetector, CSa, Image Lag, SMTR, and ISO MTL. The chart has five axes, each representing a different metric. The values for each method are as follows:

Method	ISO MTL	CSa	Image Lag	SMTR	iSRBdetector
iSRBdetector	10	10	10	10	10
CSa	10	10	10	10	10
Image Lag	10	10	10	10	10
SMTR	10	10	10	10	10
ISO MTL	10	10	10	10	10

A radar chart comparing the performance of iSRBdetector, CSa, Image Lag, SMTR, and ISO MTL across five metrics. The radial axis represents a score from 0 to 25. The green area represents the performance of the iSRBdetector, which shows high performance in iSRBdetector (approx. 10), CSa (approx. 10), Image Lag (approx. 10), SMTR (approx. 10), and ISO MTL (approx. 10).

Metric	iSRBdetector	CSa	Image Lag	SMTR	ISO MTL
iSRBdetector	10	10	10	10	10
CSa	10	10	10	10	10
Image Lag	10	10	10	10	10
SMTR	10	10	10	10	10
ISO MTL	10	10	10	10	10

¹ 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. Contents in this document are subject to change without notice.



USA HEADQUARTERS
Salt Lake City, UT
P: +1-801-972-5000

GERMANY
Walluf
P: +49-6123-971-300

CHINA
Wuxi
P: +86 510 8820-1652

For a complete listing of our global offices, visit www.vareximaging.com

© 2026 Varex Imaging Corporation. All Rights reserved. Production of any of the material contained herein in any format or media without the express written permission of Varex Imaging Corporation is prohibited.