

— PRODUCT ARCHITECTURE — SYSTEMS

X-ray Inspection Systems (XIS)

A modular line-scan X-ray detection platform built from three intelligent board types — Detector, Control and Power — that daisy-chain into a system of any length.

200,000:1

Electronic SNR at 150 pC

20-bit

Digital front end

10 μ s – 50 ms

Integration time range

Any length

Built to any length



SENSING PERFORMANCE

Built for image quality

- 20-bit digital front end, 0.025% linearity
- Up to 200,000:1 electronic SNR (4.8 ppm at 150 pC)
- 64 or 128 channels per board for the 1.6 mm pitch configuration; 32 – 2048 available
- Photodiode pitches - 0.4 / 0.8 / 1.2 / 1.6 / 2.5 / 6.0 or custom

SYSTEM & INTEGRATION

Straightforward to integrate

Modular length	Built to any length
Host interface	Gigabit Ethernet
Local bus	CAT6 daisy chain
Trigger modes	Internal, level, edge
Software	API + evaluation software
Firmware	Customer-managed firmware updates

MODULARITY

One system, any length

- Up to 62 D boards per Control/Power zone
- Longer builds add zones, each independently IP-addressed
- Dual-energy and custom pitch on request
- Flat, L-shape, U-shape and arc array geometries

MECHANICAL & SHIELDING

Built for the line

Cross-section	241.2 × 53.0 mm
Window	Low-attenuation carbon fibre
Shielding	Pb front & backscatter
Construction	Stainless / aluminium, sealed
Interface plate	Left- or right-hand
Mounting	Ø6.5 mm thru-hole (M6)

TYPICAL APPLICATIONS

Security inspection

Food inspection

Industrial process control

CT imaging

Thickness measurement

Mineral sorting

Multi-view imaging

Foreign particle detection

Waste sorting

Non-destructive testing

Bone densitometry

ISO 9001:2015

ISO 27001:2022

ISO 14001:2015

ISOQAR Cert No. 27075