

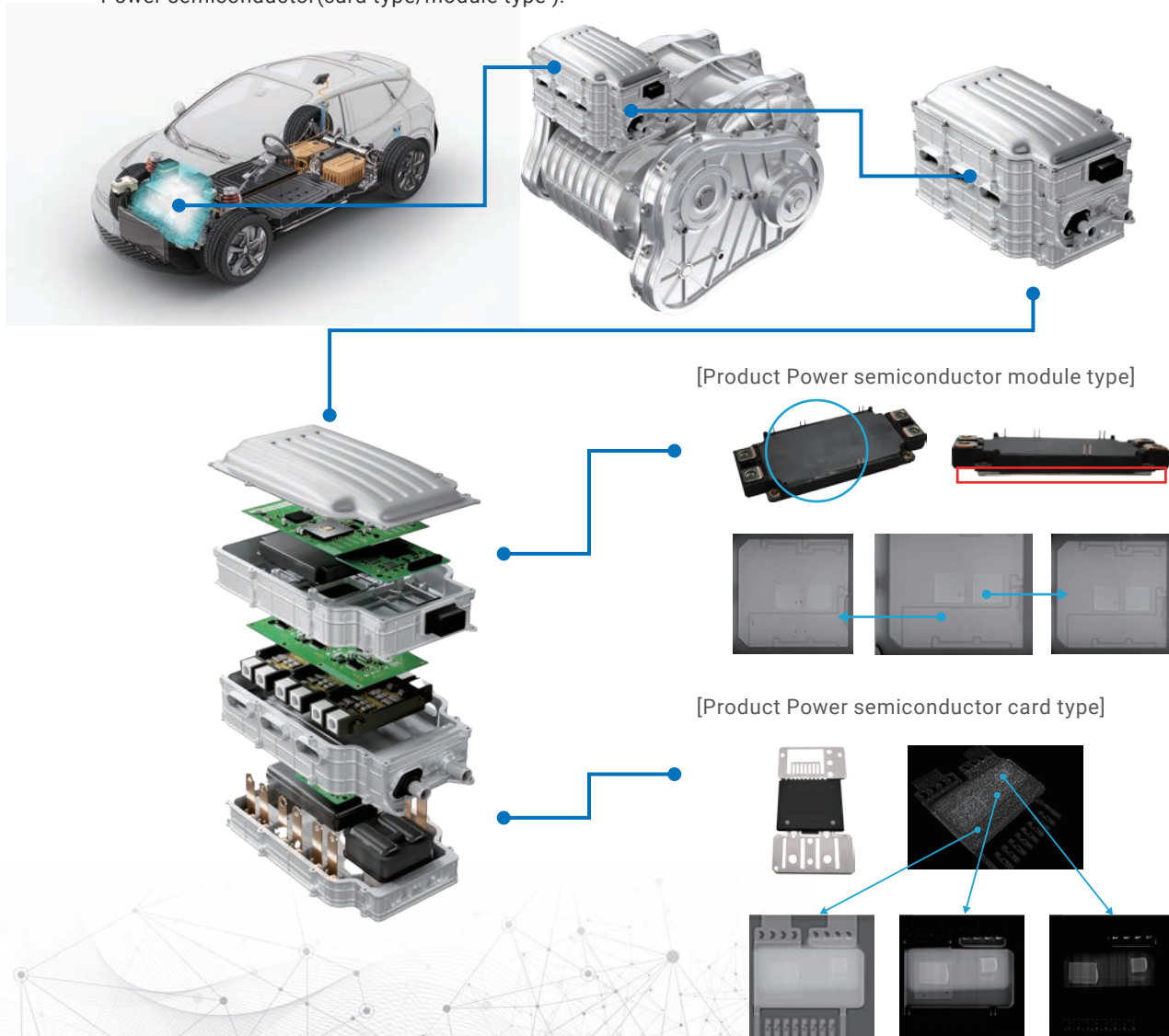
# AXI enables both productivity and quality for increasingly integrated and complex xEVs



# Specifically designed to meet the inspection needs of the EV industry

## High Powered X-Ray

Higher output X-ray sources make it possible to inspect materials that are difficult for X-rays to penetrate, as well as large, thick objects. We respond to inspection needs for EV power modules, Inverters, eAxes and Power semiconductor(card type/module type ).



## Expansion of inspection targets



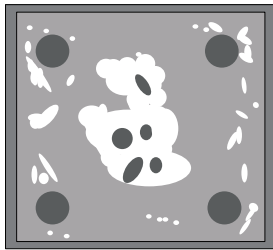
The VT-X850 is built with stronger conveyors, stronger motors, and larger doors to accommodate heavier samples such as Power semiconductor(card type/module type) and eAxle modules.



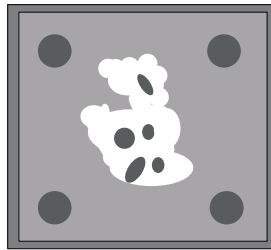
## AI Enhanced Inspection Algorithms

By harnessing advanced AI image analysis techniques, the automated inspection logic effortlessly identifies and highlights defects, enabling operators of varying skill levels to easily comprehend and interpret the results.

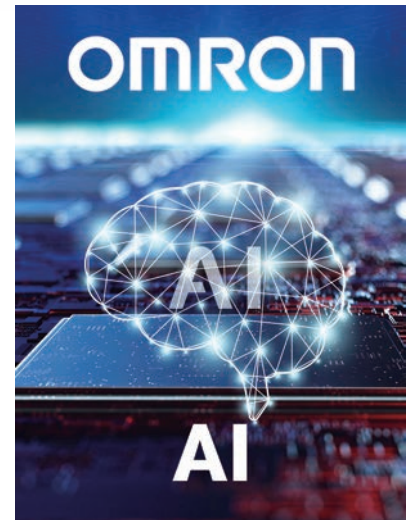
Default Logic



AI Enhanced Logic



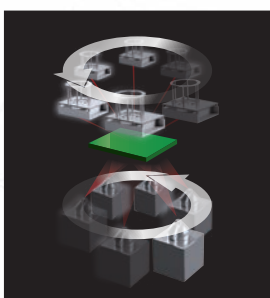
AI clearly separates noise and inspection target (void) and assists human judgment.(image)



## Benefits of Omron 3D CT X-Ray technology

### The Omron CT Advantage

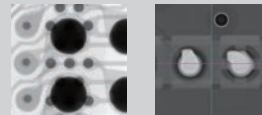
CT imaging leverages Omron's proprietary imaging technology (patented) cultivated through its FA business to achieve both high-definition image information comparable to analytical equipment and ultra-high speed. This makes it possible to perform not only evaluations in cutting-edge semiconductor manufacturing research departments and method development departments, but also in-line inspections during mass production with a single machine.



### CT provides industry-leading image quality and defect detection

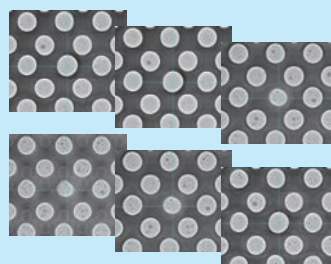
#### Transparency (2D) X-Ray

Difficulty distinguishing between high-quality and inferior products

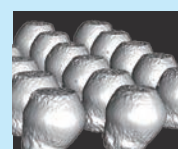


#### 3D CT X-Ray

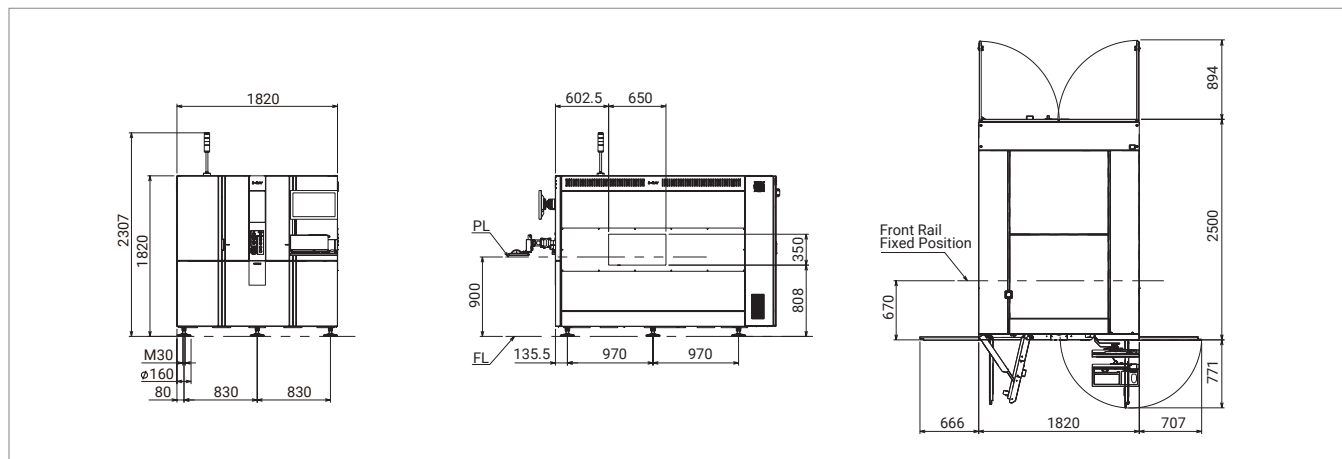
Can be inspected at specified layer



More realistic shape reproduction



## Outline dimensional drawing



## Hardware Configuration/Functional Specifications

Item		Description		
Model		VT-X850		
Type		T1	T2	T3
Inspection object		Power devices, etc.	Power device,Inserted components, Press-fit,Connectors,etc.	Inserted components, Press-fit,Connectors,etc.
Inspection items		Voids, bridges, through-hole solder filling, foreign matter/solder scraps, presence/absence of leads, etc. (selectable depending on the object to be inspected)		
Imaging system	Imaging system	3D-slice imaging by using parallel CT		
	Imaging resolution	15,20,25,30μm Selectable by inspection target	25,30μm Selectable by inspection target	
	X-ray source	Micro-fucus closed tube		
	X-ray detector	Flat panel detector		
Inspection target	Workpiece size	150×100±0.2 ~ 610×400±0.2mm	150x100±0.2 ~ 610x515±0.2mm	
	Workpiece thickness	1.00mm~5.00mm		
	Workpiece weight	Less than 40.0kg		
	Workpiece height*	90mm	230mm (Optional: 265mm)	335mm
Main body	Dimensions	1,820 (W) ×2,500 (D) ×1,820 (H) mm (excluding protrusions, signal towers, and displays)		
	Weight	Approx. 5,500kg		
	Conveyor height	900mm±20mm		
	Power supply	Single phase 200/208/220/230/240 VAC, 50/60Hz		
	Rated power	3.3kVA		
	X-ray leakage	Less than 0.5 μSv/h		
	Air supply	0.4~0.6MPa		
	Safety standard	CE,UKCA,KC * Acquiring		

\*(including the sum of top and bottom, warp, deflection, and internal board)

- The application examples described in this brochure are for reference only. Please check the functions and safety of the equipment before using it
- When using in conditions or environments not described in this brochure, or for applications such as nuclear energy control systems, railroad systems, aviation systems, vehicles, combustion systems, medical equipment, amusement machines, safety equipment and others that could present a risk to life or property, Omron assumes no guarantee regarding the products except in the case of special product uses identified by Omron or with special agreement.
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