PXR

PROCON X-RAY

CT-ALPHA 240 kV

Multiple possible configurations
for a large degree of flexibility

CT-ALPHA 240 kV

Key Facts

No compromises: from nano-focus to high-power.

Flexible: multiple detector and/or multiple X-ray source configurations possible.

Extendable: plenty of room for apertures and attachments (robot arms, heat- and tension stages, in situ).

Versatile: from research applications to industrial use.

Future-proof: our Python API paves the way for your automation and AI applications.

Application examples: electronics, printed circuit boards, battery cells, micro-structured foams, all manner of geological samples.

With the CT-ALPHA 240, ProCon X-ray offers a large degree of flexibility and customisation to suit the intended use cases.

This is one of our state-of-the-art CT systems, designed to deliver no compromises in performance, from nano-focus precision to high-power imaging. The CT-ALPHA 240 can be optionally equipped with multiple detectors and X-ray sources, allowing for versatile scanning capabilities across a wide range of applications.

The CT-ALPHA 240 is built inside a larger housing unit than our CT-ALPHA 160, and thus provides ample space for additional apertures and attachments such as robot arms, heat- and tension stages, and in-situ components. This is a system that is fully extendable to meet evolving needs.

From research experiments to industrial-scale operations, it excels in both environments. Future-proof your investment with our Python API, enabling seamless automation and AI integration for the next generation of advanced imaging. Image reconstruction can also be adjusted with optional aperture build-ups.

Ideal for scanning heavier and larger samples composed of various materials, this system provides the power and precision required for today's demanding applications in a large variety of industrial settings and research situations.

Specifications

	Transmission Source	Reflection Source
X-ray source	20 - 240 kV up to 50 W 1 µm focal spot	20 - 300 kV up to 300 W 5 µm min. focal spot
Detector	16 Megapixel 100 µm pixel size 4260 x 4260 pixel	
Highest spatial resolution	< 0.5 µm	< 3 µm
Smallest voxel size	< 0.1 µm	< 1 µm
Max. object size	Ø 400 x H 500 mm	
Max. object weight	25 kg	
Max. scan size	Ø 340 x H 500 mm	
FDD	up to 900 mm	
FOD	0.3 - 750 mm	4 - 750mm
Number of axes	> 7	
System dimensions (L x W x H)	2400 x 1200 x 2200 mm	
System weight	< 5000 kg	
Power supply	100 - 240 V AC, 50/60 Hz	

This is an example configuration with corresponding values.

*FDD – Focus Detector Distance
**FOD – Focus Object Distance
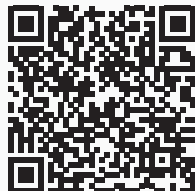
To read more about this system, scan the code to visit our website.
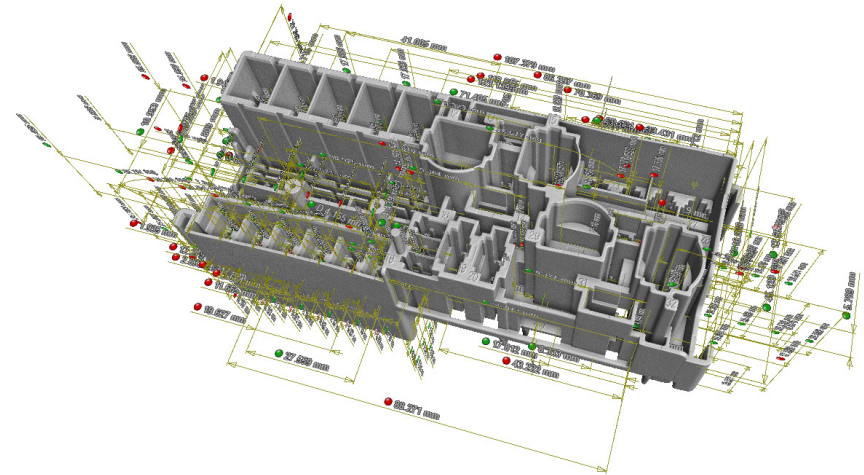
Features

‣ Defect recognition (voids, cracks, etc.)
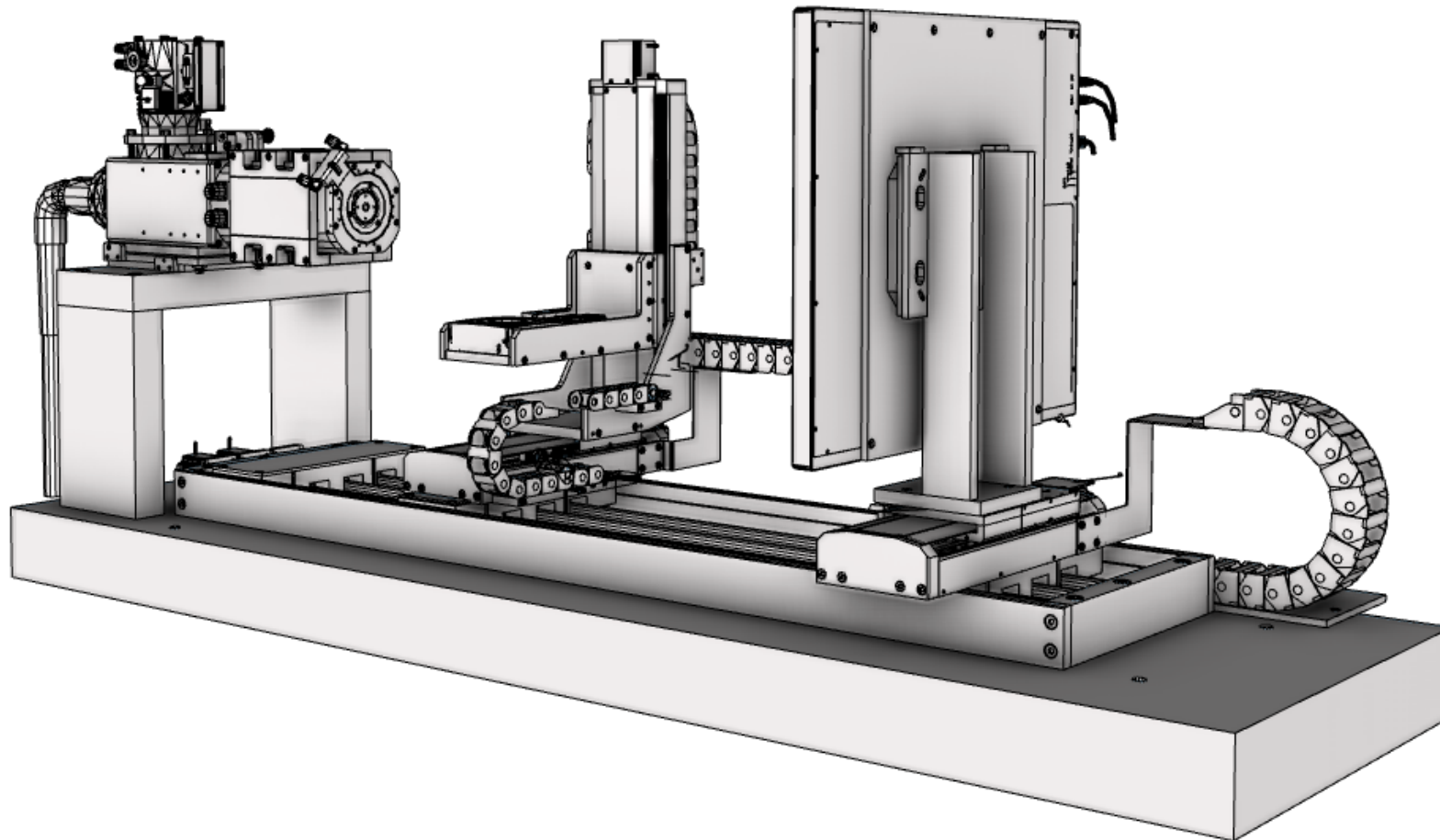
‣ Radiation safety better than 1 µSv/h

Application Cases

Below: high-power dimensional analysis of a plastic sample.

Below: a sintered aluminium (AISI10MG) part to analyse the sintering process of the material and the presence of microporosity.

Concept drawing of a standard CT-ALPHA model. Many customisations to this system are possible.