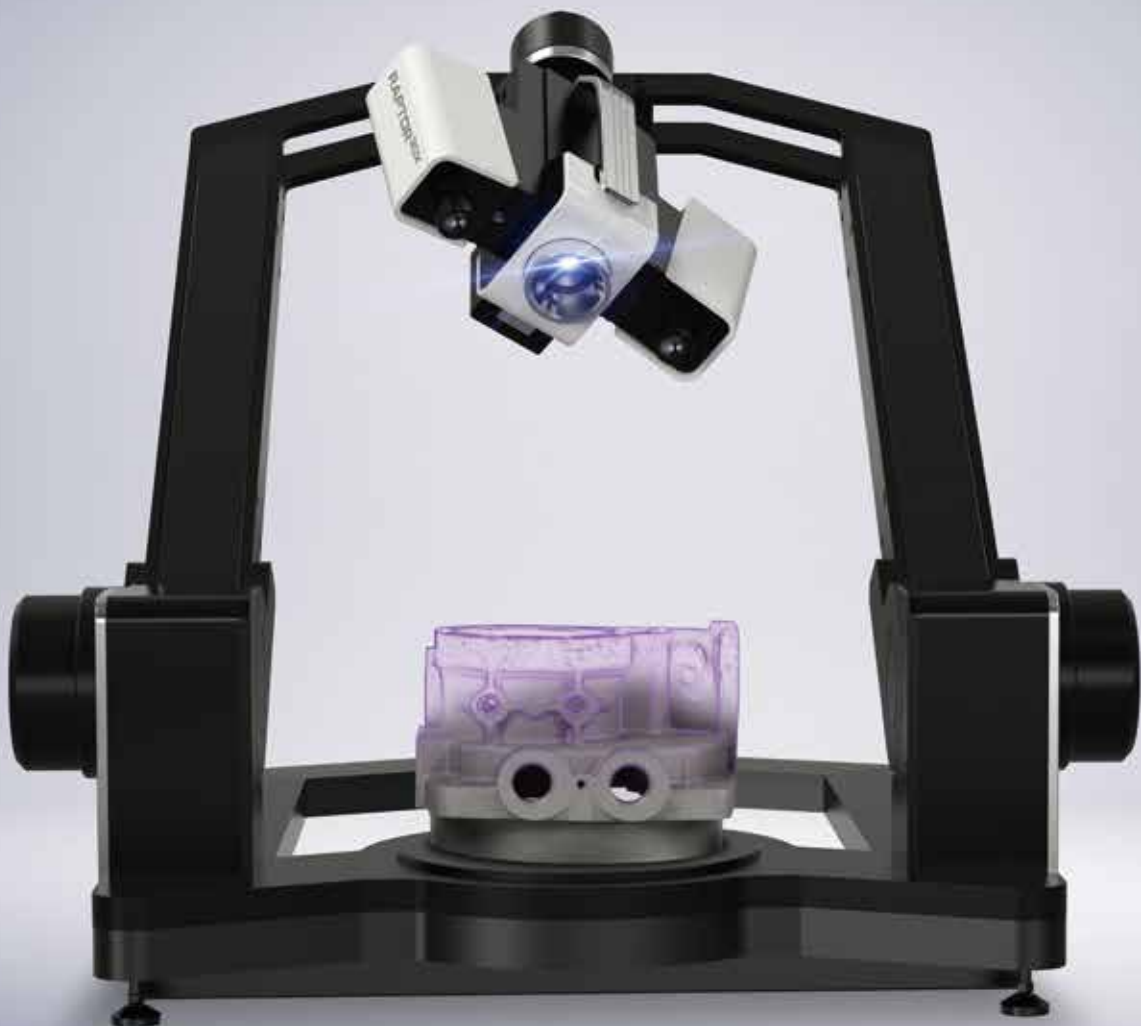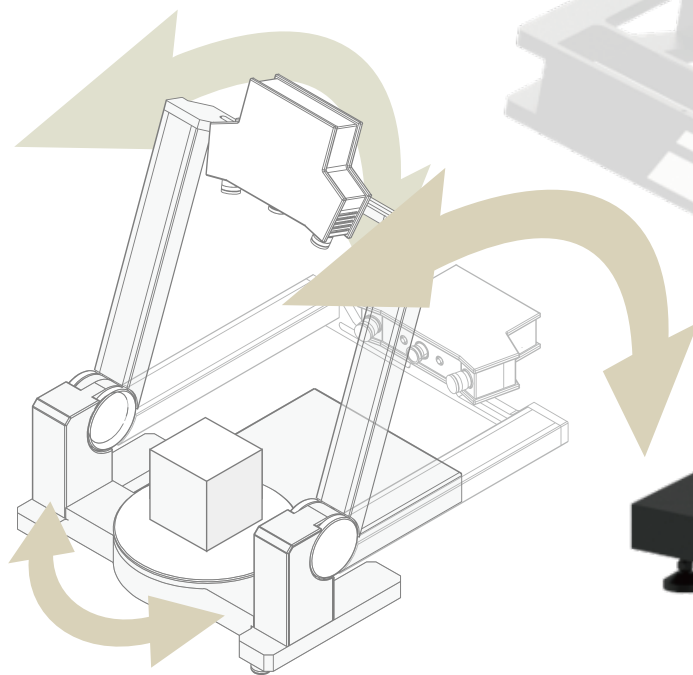# 3DX
RAPTOR

Metrology 3D Scanner with robotic platform

Raptor3DX

Providing you the whole new level of convenience in 3D metrology

Raptor3DX is the next generation hybrid 3D scanner that does not require fixation of objects.

Detachable 3D sensor

Hybrid = Automatic X Manual Mode

When higher freedom of scanning is required,
the Raptor3DX sensor can be detached from the automation platform.
Maximum area of 600mm per single shot can be captured, enabling large scanning tasks such as BIW and turbine engine.

Automation Mode - robotic platform

‣ Digitize your object with only a single click
‣ Fully automatic platform with the sensor moving vertically for 360° scan
‣ Just place-and-go method. No fixation of object required
‣ Auto-sync scan will position the object where it needs additional scans

Manual Mode

‣ Covers large scale objects with scanning flexibility
‣ One single shot can scan up to 600mm in diagonal length
‣ Compatible with most conventional stands & tripods

Conventional automatic systems require users to use jigs or clamps to hold down the objects, due to their swinging movement.

Raptor3DX sensor moves up and down in relation to the scan object, making the object stable.

Raptor3DX reduces engineer's working time dramatically with easy-to-use automated robotic platform.

Raptor3DX Sensor

▸ Optical 3D scanning machine for high-precision 3D data

▸ Three interchangeable FOV (scannable area) by the user

▸ Automatic Exposure measures the contrast of the surface for best scan result

▸ Texture scanning for intuitive expression of object surface

Compatible with third party inspection and reverse engineering software

3DX Scan Software

▸ Controls Raptor3DX and is designed to work with Raptor3DX seamlessly

▸ Based on 64-bit architecture to handle huge amount of data

▸ Easy user interface lowers learning curve significantly.

▸ Automatic alignment of scan datas

▸ Recovery mode helps you to save your data from unexpected situation

▸ Outputs triangulated STL data for full compatibility

Robotic Arm + Raptor3DX

Expand the capabilities of your digitization with the integrated system between the robot and Raptor3DX sensor*

⋆ Currently in development.
Please contact VYLO for availability.

Raptor3DX Highlights

3DX RAPTOR

Hybrid Type with robotic platform

▸ Robotic platform completely eliminates manual positioning of the sensor while scanning

▸ 3D Scanner sensor can be detached anytime for large scale scanning

▸ High flexibility system that is future proof – for small to huge sized objects

Stable Scan Stage (SSS) Technology

▸ The proprietary technology enables platform stage to avoid swinging movement during scanning

▸ No more clamping or fixation of scan parts before scanning
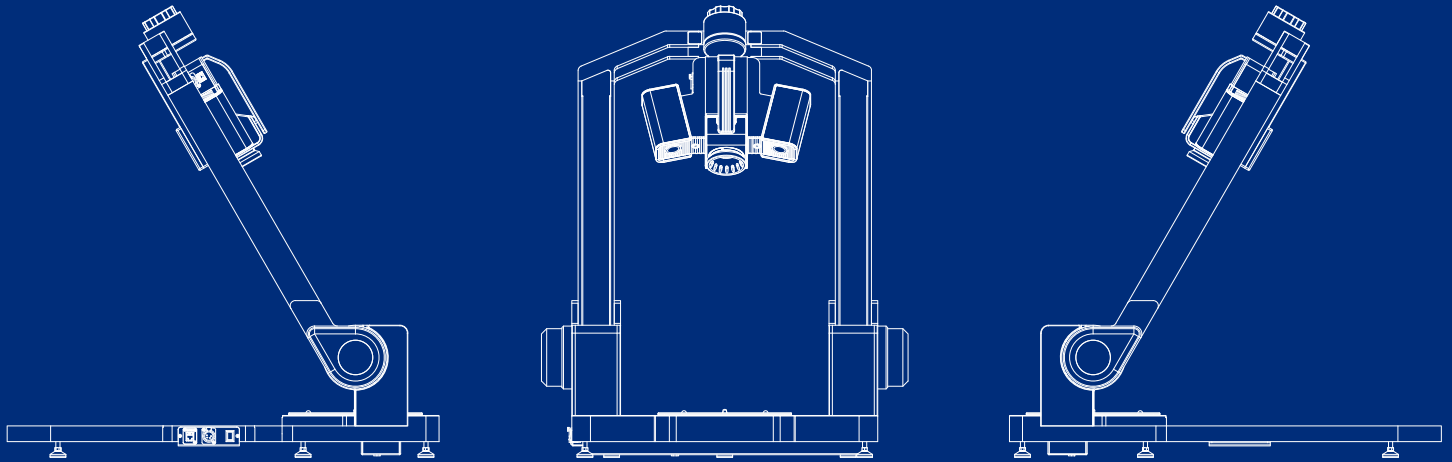
▸ Reduces engineer's preparation time by a fraction

Multi Scanning Area (FOV)

▸ One unit covers up to three scanning area (field-of-view)

▸ Interchangeable by the user simply by switching the lens set

From small to large sized objects can be digitized without extra investment

Enhanced Data Interface

▸ Gigabit Ethernet Interface

▸ The optimal communication interface ideal for factories and offices

▸ Fast and stable data transfer for heavy data

▸ No need for driver installations; universal connector for all devices

Specification

Product	Non-contact optical 3D scanner (stereo vision)
Resolution	2.0 mega-pixel / 5.0 mega-pixel
Scan Area (FOV)	150, 330, 500 mm (2MP) / 100, 300, 600 mm (5MP)
Point Distance	0.07, 0.16, 0.25 mm (2MP) / 0.03, 0.09, 0.18 mm (5MP)
Working Distance	450 mm
Platform	SSS Technology applied 3-axis platform (360° rotation / -5° to 90° arm / ±45° sensor tilt)
Interface	Gigabit Ethernet
Data Output	Polygon mesh STL, OBJ
Dimension	320 x 220 x 140 mm (sensor) / 700 x 916 x 252mm (platform)
Weight	3.3 kg (sensor) / 30 kg (platform)
Input	DC 24V, 5A, 120W
O/S	Windows 7, 10 (64-bit)

VYLO