SmartScan VR800

Get the full picture | Focus on what matters

The SmartScan VR800 fundamentally changes the conversation on structured light scanning. With a patented dual stereo camera plus mechanical optical zoom projection unit setup, the need for multiple base lengths, complex lens changing and frequent recalibration are now a thing of the past.

Get the resolution and coverage needed the moment it is required, no hand tools required. With the VR800, simply change the settings through the software to alter the size of the measurement area or the resolution of the measurement results. The system is also set up for automated inspection system integration.

Focused measurement

Multi-camera processing allows for near-simultaneous measurement data and part orientation capture with **Smart Snap**, massively reducing data weight and processing times when combining scans.

Variable resolution

Vary the measurement area and resolution of each camera pair in a matter of seconds thanks to the digital projector's mechcanical zoom lens.

Smart workflows

Change the data resolution across a constant measurement volume with **Smart Resolution** to get more detail where it matters most.

Adapt measurement volume and resolution while maintaining 5 million data points with **Smart Zoom** ensure high-speed data processing.

Multi-camera setup

Dual stereo camera setup with four 20 MP cameras end the hassle of changing lenses for different resolutions and fields of view.

Ergonomic design

Compact design protects optics while embedded controller and convenient handle allow for easy repositioning.

Robust construction

Custom carbon-fibre frame delivers unmatched measurement stability and reliable results in shop floor conditions.



Automation ready

Ready for fully automated robotic inspection thanks to rigid design and high-speed measurement.

Best-in-class accuracy

SmartScan VR800 offers unmatched accuracy values in its class. Each scanner passes our acceptance test based on VDI/VDE2634 Part 3 before delivered to the customer.

Photogrammetry add-on

Combine the scanner with a DPA add-on camera system to extend the measurement volume for the measurement of larger parts.

Quick setup

Fast warm-up, integrated controller, no interchangeable lenses and a single-position calibration check process make it simple to get right into measurement.



	Main benefit	Criteria for choosing SmartScan VR800	Hexagon	Other
Productivity Resolution where you need it	Flexibility	Can the scanner easily and quickly switch between measurement volumes and resolutions?	Yes	
		Can the scanner change measurement volume and resolution from scan to scan and in the same project?	Yes	
		Can scan data of different measurement volume and resolution be processed in a single project?	Yes	
		Can you change measurement volume and resolution without tools?	Yes	
		Can the scanner benefit from a dedicated photogrammetry add-on?	Yes	
	Detail	Does the scanner offer a multi stereo camera system for fast and reliable data acquisition with a combined camera power of 80 MP?	Yes	
	Speed	How long does it take to change measurement volume and/or resolution?	Less than 3 sec.	
		Can you use the scanner in the same inspection software as Hexagon Absolute Tracker and Absolute Arm systems as well as third party devices?	Yes	
		Is the controller unit integrated in the scanner for fast pre-processing of scan data?	Yes	
		Does the system have a function that allows for the simultaneous collection of 3D scan and part orientation data?	Yes	
Usability Ease of use to simplify workflows	Quick setup	Does the scanner have a quick warm-up time?	Yes	
	User friendly	Can scan data be aligned without targets on the object?	Yes	
		Can scan data be aligned with targets on or around the object?	Yes	
	Smart workflows	Does the scanner allow semi-automation with turntable or turn-tilt units?	Yes	
		Is the scanner suitable and ready for automation through mounting on a robot/cobot?	Yes	
	Reduced calibration	Does the scanner benefit from long recalibration intervals?	Yes	
		Is a quick calibration check available?	Yes, 9 sec.	
Quality Reliability through unmatched stability	Stability	Is accuracy guaranteed for a temperature range between 18 and 28°C?	Yes	
	Reliability	Is the system compliant with impact, shock, vibration, emission and environmental norms (CE or CB)?	Yes	
		Does the system include artefacts and software to verify its accuracy performance?	Yes	
		Is the scanner deeply integrated in a market leading software package?	Yes	
		Is a 24-month warranty offered as standard with the system?	Yes	
	Best-in-class accuracy	Does the scanner pass an acceptance test before delivery?	Yes	
		Is the acceptance test for accuracy based on an internationally recognised standard?	Yes	
	Automation-ready	Is the system suitably stabilised for automation implementations (i.e. high-end carbon fibre frame, temperature control)?	Yes	
	Worldclass service and support	Does your scanner benefit from a wordwide service and support network?	Yes	

Hexagon is a global leader in digital reality solutions, combining sensor, software and autonomous technologies. We are putting data to work to boost efficiency, productivity, quality and safety across industrial, manufacturing, infrastructure, public sector, and mobility applications.

Our technologies are shaping production and people-related ecosystems to become increasingly connected and autonomous – ensuring a scalable, sustainable future.

Hexagon's Manufacturing Intelligence division provides solutions that use data from design and engineering, production and metrology to make manufacturing smarter.

Learn more about Hexagon (Nasdaq Stockholm: HEXA B) at hexagon.com and follow us @HexagonAB.

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