









2D Optical Measuring Device – mobile & compact!

Accurate and precise measurement in a matter of seconds – smart and intuitive design





Series V-CAD rapid

Intuitive measurement made easy

See it – try it – believe it: reliable workpiece measurement has never been that fast ... and fun! Whether you opt for the model featuring a 'single field-of-view' system or for the larger variant equipped with a movable stage affording a measurement range of up to 300 x 200 mm – a huge variety of 2D measurement features are available to you, either in manual or fully automatic CNC operation. And design options go even further: depending on your specific needs and requirements, you can choose among three powerful Schneider software packages: M3, SAPHIR and award-winning SAPHIR QD. Many decades of experience in the design of high-precision multi-sensor measuring machines have gone into the development and manufacture of the V-CAD rapid series. V-CAD rapid stands for reliability you can count on, and value(s) you can trust – made in Germany – made by Schneider Messtechnik – SIMPLY PRECISE!

Are all of your employees really familiar with your measurement device?

Getting there is easier than you might imagine! The innovative V-CAD rapid device features a compact and mobile design that combines high-precision measurement technology with unprecedented ease of use and flexibility. Thanks to the intuition-based user interface of the well-proven M3 measuring software, this innovative device is unmatched in terms of user friendliness: The workpiece can be positioned freely in the coverage area (field of view), and the measurement process is started with a just a tap on the multi-touch screen of the panel PC. Within only a few seconds, V-CAD rapid provides comprehensive measurement results, complete with reporting! Fast – straightforward – reproducible, and with a sense of accuracy and precision that sets new standards in this device category. V-CAD rapid puts reliable measurement at your fingertips!



V-CAD rapid covers

a measurement range of up to

65 x 55 mm,

without stage

movement.

The device shown above is equipped with some optional features that are not included in the standard configuration.

For further information, please visit our Website: **www.dr-schneider.de**



Standard features of V-CAD rapid

- 5-megapixel CCD B/W camera
- Telecentric 4-step motorised zoom lens
- 4 different fields of view for spot-on measurement
- Telecentric LED transmitted light illumination
- LED ring light illumination for incident light measurement
- Multi-touch panel PC equipped with WIN7
- LAN and WLAN network connection
- Measurement software M3
- Measurement and analysis software SAPHIR
- Factory calibration certificate
- Granite/aluminium sandwich design

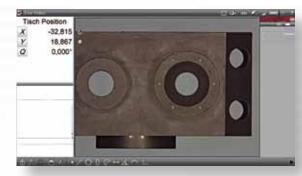
NEW, now also available with a large stage and a measurement range of up to 500 x 200 mm.

Key benefits of V-CAD rapid

- Automatic recognition of geometric primitives (basic shapes) without pre-selection
- No need for manual workpiece alignment in the field of view
- 4-step motorised zoom lens for reliable measurement even of minute workpiece features
- Measurement in a matter of seconds
- Mobile design

Optional features of the V-CAD rapid series with M3

- DXF overlays
- qs-STAT interface



DXF overlays enable the display of DXF data on the live image.



The **qs-STAT interface** serves to export values to the qs-STAT statistics programme.









Measurement and analysis software SAPHIR

This valuable software tool enables measurement not only of individual parts, but also of several identical parts (MMi=multiple measurement identical) and several different parts (MMd=multiple measurement different) in one operation. Measurement with SAPHIR QD is easy: Once the workpiece has been placed on the glass plate within the coverage area, all workpieces are automatically recognised and measured with unparallelled accuracy and precision - no tedious manual alignment is required! The software also offers tabular and graphical reporting functions along with a feature enabling reports to be displayed as overlays on the pertinent live images, complete with "good/bad" colour coding.

Efficient workflows are essential to successful business operations, and so is smart quality control. The choice of the right machinery with the right software is a key determinant in this regard because nothing works without top-notch inspection equipment! Since "Schneider" is the German word for "tailor", you can rightly conclude that SAPHIR is a truly "tailormade" measuring software that leaves nothing to be desired: from "A" as in "axis alignment" to "Z" as in "zero-point administration" – SAPHIR is a valuable resource with invaluable features. For further information about this technological gem, please request our free "SAPHIR" brochure.



Measurement software M3 with image processing feature

M3 is a measurement software with image processing features designed for use on a touch-screen panel PC. This valuable tool enables accurate and precise manual measurement of geometrical elements by means of an intuitive multi-touch operating system. Among its main strengths are the well-structured user interface as well as its innovative image processing functions ensuring fast and reproducible measurement point acquisition. All element-related reports can be displayed in both graphical and tabular format. The software also includes a tolerance checking feature in accordance with the pertinent DIN/ISO standards.

Technical Specifications of the V-CAD rapid series

Model		V-CAD rapid	V-CAD rapid 300 M3		V-CAD rapid 300 S		V-CAD rapid 300 CNC
Measurement software		M3/SAPHIR QD	M3		SAPHIR		M3/SAPHIR
Measurement range	mm	65 x 55	300 x 200				
Focal length Z	mm	50	200				
Lens			4-step motorised zoom, telecentric				
Magnification			65.5 x 55	32.5 x 27.5	16 x 13.5	8 x 6.5	
Field of view	mm		0.125 x	0.25 x	0.5 x	1.0 x	
on the screen 2)			4.7 x	9.5 x	19 x	38 x	
Depth of field	mm		45.0	11.0	2.80	0.70	
Working distance	mm		150				
Max. workpiece weight	kg		10.0				
Repeat accuracy (repeatability) mm		0.001					
Length measurement error 1)		Measuring length L in mm					
optical (2D) $E_{UV, MPE} =$		(3.5+L/50 mm)μm					
DIN EN ISO 10360-7							
Our measurement is based on		$\beta = 0.125 \triangle \text{ lens } 0.125 \times \text{ (field of view } 65.5 \times 55 \text{ mm)}$					
Dimensions	mm	W 354 D 444 H 700	0 444 H 700 W 900 D 950 H 950				
Weight	kg	30	140				
Electric power supply		220-240 VAC, 50-60 Hz					

¹⁾ Ambient conditions $20^{\circ}\text{C} \pm 1 \text{K}$, temperature gradient $\Delta_{th} = 1 \text{K/h}$, $\Delta_{tot} = 4.0 \text{K/d}$, measured with a calibrated working standard



²⁾ These values apply to the standard monitor with its factory default settings