



## VISIOLINE® VL 650

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Courage & Khazaka

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### BENEFITS

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- ⦿ Measurements and calibration can be performed very quickly
- ⦿ It is very easy to handle and does not require specialist knowledge.
- ⦿ The replica can be stored for documentation.
- ⦿ Making of the replica and the analysis do not necessarily have to be done at the same time.
- ⦿ Precise movement of replica in xy direction for accurate measurements
- ⦿ Ideal for multicentre studies as replicas can be collected from several locations and analysed together
- ⦿ 3D and false colours for impressive marketing images
- ⦿ Data stored automatically in a database

The Visioline® VL 650 is the ideal and economic instrument to objectively analyze the deeper lines and macro wrinkles such as "crow's feet". It is a further development of the renowned Quantirides® system.

It is very reproducible and accurate. To analyse the same area before and after treatment a mask function can overlay the images of the replica over an already previously taken replica to match the same position. Four images can be shown on the screen at the same time.

For each study a separate database can be created and all results and settings are automatically saved there. Thus the follow up of each study is very easy. A simple calibration tool enables the user to be sure of the accuracy of distance and depth (x,y,z). Special image tools as 3D and false colours illustrate the output for marketing purposes.

### MEASUREMENT PRINCIPLE

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The measurement is based on shadows on a silicon replica. The replica, which is a negative of the skin surface, is illuminated uniformly with a defined light source mounted in a specified angle. The shadows visible on the replica created by the oblique light are captured with a high

resolution, quick FireWire camera, which is mounted vertically to the replica. The sophisticated software analyses different characteristics of the wrinkle in real length and depth (in mm) and a shape factor.

## FIELDS OF APPLICATION

- 🌀 Product development, claim support and efficacy testing for cosmetics, pharmaceuticals and detergents
- 🌀 Used for interesting studies in dermatology and cosmetology
- 🌀 Scar measurements done with the negative image function of the software

## SOFTWARE AND PARAMETERS

It is recommended to analyse all the replicas from one study at the same time. A variety of parameters can be calculated and 3D images created.

- 🌀 Total wrinkle area (mm<sup>2</sup>)
- 🌀 Percentage of wrinkle area
- 🌀 Number of wrinkles
- 🌀 Total length (mm)
- 🌀 Mean length (mm)
- 🌀 Wrinkle depth (mm)
- 🌀 Mean depth (mm)
- 🌀 Max wrinkle depth (mm)
- 🌀 Mean shape factor

## TECHNICAL INFORMATION

Dimensions: 15.3 x 21.7 x 21.7 cm, Weight: 4.0 kg, Power supply: external 100-240 VAC, 47-63 Hz, DC 12V/9A, Light source: white LEDs under 35° angle (+/- 0.5°), Interface: USB  
Measurement area: from 13.5 x 18 mm to 16.6 x 22 mm, Shadow length determination in µm,  
Camera: 2590 x 1920 Pixel (5 MegaPixel), Objective: Focal length: 25 mm, Aperture: 1.4-16  
XY- correction table: Resolution: 1 µm, Accuracy: 2 µm, Range: 10 mm Computer:  
Windows®XP, Vista or 7, performance must meet system requirements, USB 2.0  
Technical changes may be made without prior notice.