

OCULUS | Corvis® ST

Corneal Visualization  
Scheimpflug Technology

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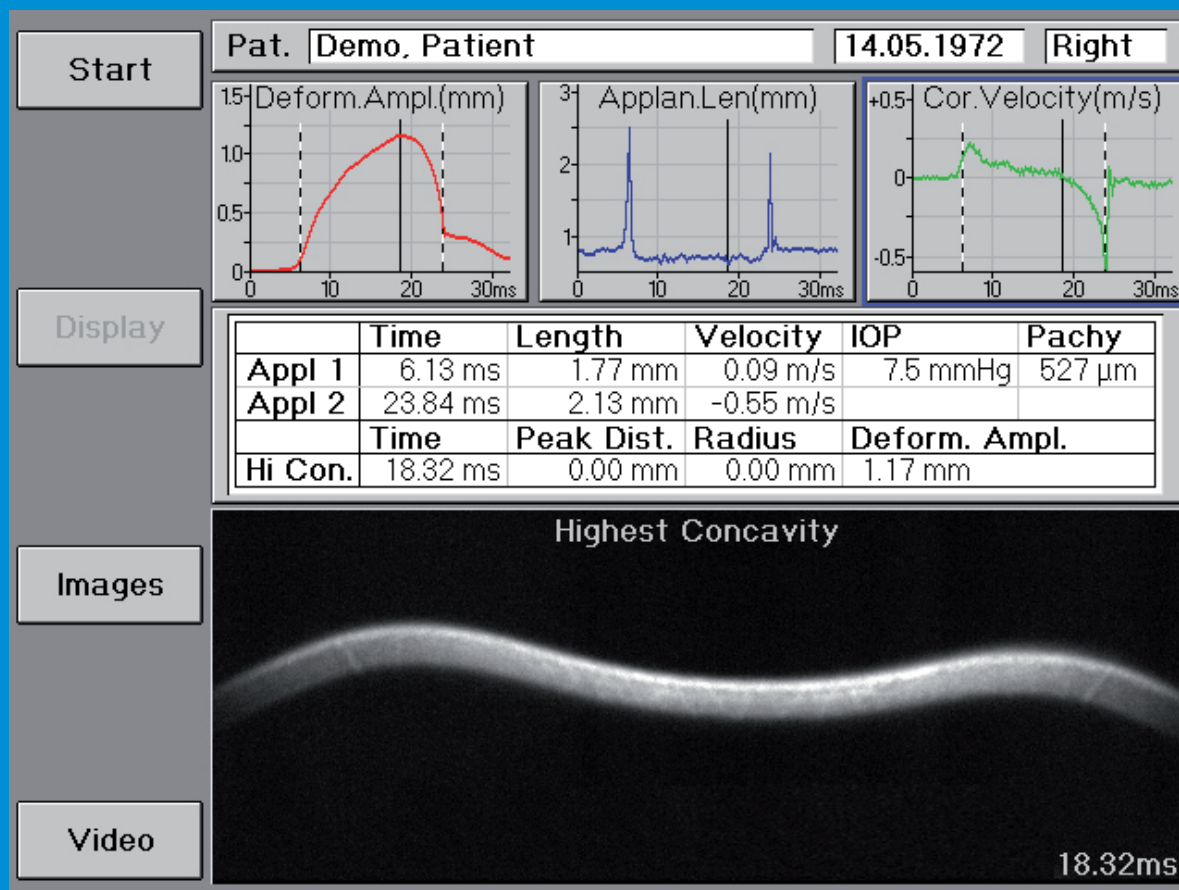


 OCULUS®

[www.oculus.de](http://www.oculus.de)

# The New Corvis<sup>®</sup> ST Tonometer

- Tonometer
- Pachymeter
- Biomechanical Properties



Non-Contact-Tonometer with visualization and measurement of the corneal deformation response to an air pulse with an Ultra-High-Speed Scheimpflug camera (4330 frames/sec).

## Current Measurement Features of the Corvis<sup>®</sup> ST

- Deformation amplitude
- Applanation length
- Corneal velocity
- IOP-measurement
- Corneal thickness
- Scheimpflug images of applanation moments 1, 2 and of the highest concavity of the cornea
- Slow-motion video of the corneal deformation after air pulse

# Applications

## Determine the true IOP with the Corvis® ST

- The Corvis® ST measures the IOP, corneal thickness and biomechanical properties. Based on these data, it has the potential to measure the true IOP.
- It determines the influence of the biomechanical properties on conventional IOP measurements.

## Screening for corneal ectasia with the Corvis® ST

- Both, stiffness and viscosity of the cornea, are reduced by ectasia
- Both effects can be analyzed simultaneously with the Corvis® ST

## Visualizing the effect of corneal crosslinking with the Corvis® ST

- With the Corvis® ST it is possible to visualize the effect of corneal crosslinking on the deformation characteristics
- The Corvis® ST has the potential to quantify the effect of corneal crosslinking on the biomechanical properties



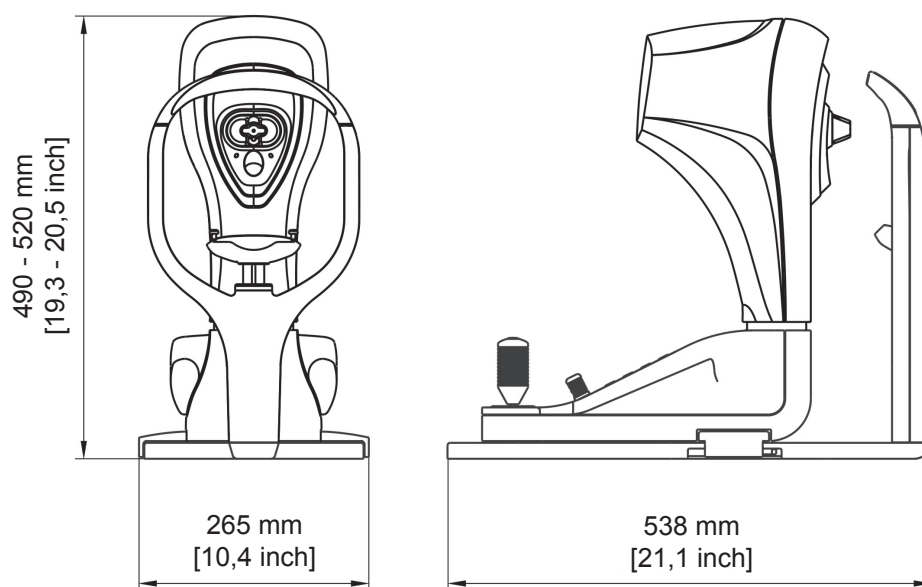
## Images of Ultra-High-Speed Scheimpflug camera



# Technical data

## OCULUS Corvis® ST

Tonometer	
Measurement range	1 to 60 mmHg
Measurement distance	11 mm
Inner Fixation Light	Red LED
Scheimpflug Camera	
Frame rate	4330 images/sec
Measurement range	8,5 mm horizontal coverage
Pachymeter measurement range	200 - 1200 µm
Measuring points	576 per image
Image resolution	640 x 480 pixel
Source of light	Blue LED (455 nm UV free)
Electrical	
Voltage	External, 110/220 VAC
Frequencies	50/60 Hz
Power Consumption	49,5 VA
Dimensions and weight	
Dimensions	265 x 538 x 520 mm (W x D x H)
Weight	Approx. 12 kg



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