OCULUS PARK 1® Pachymeter Autorefractometer Keratometer





## OCULUS PARK 1<sup>®</sup>

Three in one: pachymeter, autorefractometer, keratometer

## All measurement results at a glance

In only seconds, the PARK 1<sup>®</sup> takes pachymeter, autorefractometer and keratometer measurements of the eye using automatic measurement release. This ensures that you always obtain reproducible results.



Overview of measurement results



Pachymetry measurement results

#### Pachymeter

The optical non-contact pachymeter performs contactfree measurements of corneal thickness based on a horizontal Scheimpflug image. This Scheimpflug image generates a total of 600 absolute height values. Measurements are performed along a 4 mm slit running horizontally through the apex. Intraocular pressure is measured separately and is automatically corrected when entered into the software. A colour representation of the pachymetry visualizes the corneal thickness profile, while the numerical value is shown on the display.

#### Autorefractometer / keratometer

In addition to taking pachymetry measurements, the PARK 1<sup>®</sup> also determines the refraction values of the eye. This provides you with reliable data that correspond quite closely to subjective refraction.

The integrated distance-independent keratometer guarantees optimal precision when measuring the central radii. Pupillary, corneal diameter and pupillary distance are all determined automatically. Manual measurement is no longer necessary.



Measurement results for both eyes

## Three Steps to the Right Contact Lens

While generating accurate refraction data the OCULUS PARK 1<sup>®</sup> simultaneously determines all of the parameters required for fitting soft contact lenses. Just seconds after the measurement it presents a proposal for the right contact lens from the integrated database. This simple procedure will show your patient just how easy contact lens fitting is.

## 1 All the right values in two seconds from one measurement

The following parameters are required for fitting soft contact lenses:

- refraction values
- central radii
- corneal diameter

The PARK 1<sup>®</sup> automatically determines these parameters with a single measurement.

Patient D. o. Bir Date:	: Der th: 06.	no, Pati	ient	
Date:			(43)	
QF:	14.07. 15:30: 81%	2020 14		R
	Refrac	tion (VD	)=12 mn):	
S	. (	2.40	A	Q
-4.3	0 -	1.10	41	0
~ .	. Pa	achyme	try:	
Pachy	Apex:	560	μm	
Pachy	Min.:	544	μm	
Q:		9		
	K	aratom	atry.	
Dh	0 00 -		7000	•
Kn.	0.30 m	111 / 40.	100 30	) F *
KV:	8.22 1	IM / 41.	ID G IZ	0
Rm:	8.26 1	IM / 40	.90	
Actio	11 4 11			
motig.	0.40			
WTW:	12.8 m	m		
WTW: Pupil:	12.8 m 4.7 m	ım n		
WTW: Pupil: Q:	12.8 m 4.7 mr 9	ım N		
WTW: Pupil: Q:	12.8 m 4.7 mr 9 So	m n oftlens	Right	
WTW: Pupil: Q: Coope Procle	12.8 m 4.7 mr 9 So r Vision ar torio	m n oftlens GmbH C	Right	
WTW: Pupil: Q: Coope Procle	12.8 m 4.7 mr 9 So r Vision ar torio ype:	m n oftlens GmbH C Toric	Right	
WTW: Pupil: Q: Coope Procle Lens t	4.7 mr 9 Sor Vision ar torio ype:	m oftlens GmbH C Toric 1 Mont	Right	
WTW: Pupil: Q: Coope Procle Lens t Wearin Materi	4.7 mr 9 So r Vision ar torio ype: ng time: al:	m oftlens GmbH C Toric 1 Mont Omafil	Right :h Icon A	
Coope Procle Lens t Wearin Materi	12.8 m 4.7 mr 9 So r Vision ar torio ype: ng time: al:	m oftlens GmbH C Toric 1 Mont Omafil	Right :h Icon A	
WTW: Pupil: Q: Coope Procle Lens t Wearin Materi S	12.8 m 4.7 mr 9 So r Vision ar torio ype: log time: al:	m oftlens GmbH Toric 1 Mont Omafil C	Right :h Icon A A	AD

Printout of the measurement results

#### 2 Soft contact lens proposal at the touch of a button

The PARK 1<sup>®</sup> generates soft contact lens proposals based on refraction, central radii and corneal diameter values. Optionally you can also enter subjective refraction data into the software and utilize this as a basis for calculating contact lens power. Then simply select the desired contact lens from the list of proposals.

Drint	Name: Demo,	Neu	D.o.B.:	01.10.2001			
Print	Exam: #1 14.	07.2020 15:32	2:39 Eye:	Right QF: 91%			
	Rm(mm)	Astig(D) Axi	s(°) <u>Cor(</u> mm)	Rf/Rs(mm)			
	Kera 7.65	0.3	8 12.7	7 7.68/7.62			
D: 1	Ref. Sph.(D)	Cyl.(D) Axi	s(°) VD(mm)	Wearing time			
Display	Obj. +0.00	-0.29	20 12.00	) Any			
	Sub. +0.00	-0.29	20 12.00	Lens type			
	VD0 +0.00	-0.29	20 0.00	Spheric			
		1		- I ·			
	Manufact. L	ens	Wearing time	Dk/tø⊘ Bk			
	B&L S	ofLens Mult	1 Month F	R+L 14.5 8.8			
Save to	CIBA A	vir Optix	1 Month F	+L 108 14.2 8.6			
Patient	Conta V	ision SiH	1Day F	t+L 14.2 8.8			
1 detone	MPG&E E	CCO ch90	3 Month F	t+L 14.2 8.6			
	MPG&E E	CCO soft 4s	3 Month F	t+L 14.5 8.9			
	MPG&E E	CCO soft B	1 Year F	t+L 14.7 8.9			
	MPG&E E	CCO soft 4s	3 Month F	t+L 14.5 8.9			
	MPG&E E	CCO soft 58	1 Year F	t+L 14.5 8.9			
	MPG&E E	CCO s 58 DP	6 Month F	t+L 14.5 8.9			
Leave	MPG&E E	CCO s 58 M	1 Year F	t+L 14.5 8.9			
CLList	MPG&F F	CCO soft 68	1 Year E	145 89			

Proposals for suitable soft contact lenses

# 3 The PARK 1<sup>®</sup> supplies all the data for your contact lens order

You receive all the data you need to order the selected contact lens:

- contact lens manufacturer and designation
- base curve
- contact lens diameter
- contact lens power
- power range

Tedious leafing through contact lens catalogues is no longer necessary, as all the relevant data are already available in the software. By entering data on the overrefraction and stabilization axis you can have it calculate a further, more refined contact lens proposal.

Name Exan	e: Demo, F n: #6 14.0	Patient 17.2020	15:30:1	D. 4 E;	o.B.: 06.10.1976 ve: Right QF: 81%
Overrefraction					
Lens	B & L, Pu	reVisio	n2 , 1 M	onth	
Sph.(D) Cyl.(D) Axis(*) VD(mm) - Stab. Axis					
Applied CL	-4.25	-0.75	40	0.00	90*
Overrefraction	-0.75	-0.75	5	12.00	
Ref. VD0	-5.31	-0.85	33	0.00	
Recommendat.	-5.25	-0.75	10	0.00	$\overline{D} \mid \overline{D} \mid $
Choosen CL	-5.25	-0.75	10	0.00	D 270* N
From To Step					
Sph.(D) +0.00	-6.00	0.25			
Cyl.(D) -0.75	5 -2.25	0.50			
Axis(°) 10 180 10 Sph.(D) Cyl.(D) Axis(°)   ADD(D) 0.00 0.00 0.00 Rem. Ref. -0.04 -0.13 32					
Back		Re	esume		New search

Calculation of toric contact lenses

#### OxiMap® - visualizing oxygen permeability

A good oxygen supply for the cornea is essential. The OxiMap<sup>®</sup> shows a colour-coded representation of the oxygen permeability of soft contact lenses that is easy to understand, and that means for your patients as well. Until recently, manufacturers only quoted the oxygen permeability of their contact lenses in reference to the centre and only for a power of 3.00 D.

The OxiMap<sup>®</sup> provides you with a visual representation of the Dk/t values across the entire surface of the contact lens as a function of its dioptric power. This way, you can now easily compare different soft contact lenses with each other. The OxiMap<sup>®</sup> is sensitive to dioptric power, assisting you with advising customers and selecting the most suitable contact lens.



Oxygen transmissibility at - 3.00 D



Oxygen transmissibility at - 10.00 D for the same lens type

### Your Advantages at a Glance

- Three reproducible measurement results in only seconds (far PD, corneal and pupil diameter)
- Automatic measurement release
- Instant contact lens proposal thanks to contact lens database (spherical, toric, multifocal) including all power ranges
- Consideration of individual fitting recommendations of contact lens manufacturers
- Automatic monitoring of individual measured values with overall quality specification (QS)
- Integrated patient data management software

- Automatic storage of measured data including contact lens selection
- OxiMap<sup>®</sup>: colour-coded representation of oxygen permeability of soft contact lenses
- Intuitive use with integrated touchscreen
- Space saving thanks to slim, compact design and no need for an additional computer
- Clear results printout from integrated printer

The PARK 1<sup>®</sup> can be set up on an ophthalmic table (stand-alone solution) or on a refraction unit.



# OCULUS PARK 1® Technical Data

Pachymeter (P)	
Measurement range	200 to 1200 μm
Measuring time	approx. 1 sec.
Light source	blue LEDs (455 nm UV-free)
Autorefractometer (AR)	
Corneal vertex distance (CVD)	0; 10,5; 12; 13,75; 15; 16,5 mm
Sphere	-20 to +22 D (CVD = 12 mm), (choice of 0.01; 0.12; 0.25 D)
Cylinder	10 D (HSA = 12 mm), (choice of 0.01; 0.12; 0.25 D)
Minimum measurable pupil distance	2.5 mm
Fixation image	hot air balloon
Keratometer (K)	
Measurement range	9 to 99 D
	3 to 38 mm
Accuracy	± 0.1 D
Reproducibility	± 0.1 D
Technical specifications	
Dimensions (W x D x H)	266 x 538 x 493-523 mm (10.47 x 21.18 x 19.4 - 20.59 in)
Weight	12 kg (26.45 lbs)
Power supply	100 - 240 V AC
Frequency	50/60 Hz
Printer	thermal printer
Display	TFT - LCD 5.7" (touchscreen)
Interface	USB

**C**€ in accordance with Medical Device Directive 93/42/EEC



#### WWW.OCULUS.DE



OCULUS is certified by TÜV according to DIN EN ISO 13485 MDSAP