

MOPTIM



Dry Eye Analyzer

**DEA**

 **Grafton Optical**

# DEA Dry Eye Analyzer

## COMPLETE DRY EYE DIAGNOSIS



DEA Dry Eye Analyzer, demonstrated on complete holder and instrument table (optional).

**D**ry eye disease (DED) has become a growing health problem worldwide. Millions of people worldwide are suffering from dry eye, and this number is increasing year by year. Even though the symptoms may be mild at first, it is important to recognize them and make early treatment. Left untreated, dry eye would get worse. It can also develop into other eye conditions like corneal abrasions and ulcers.

The **DEA Dry Eye Analyzer** by Moptim is an innovative device that performs complete examinations for dry eye with outstanding imaging capability. The compact design makes it easy to be integrated into any practice seamlessly.

### Excellent Performance

- 8 mp high resolution camera
- Up to 8 mm NIBUT measurement range
- Comprehensive dry eye assessment
- Rich report templates

### Easy-to-use

- Streamlined software workflow
- Possible to create a custom protocol
- Auto focus, auto exposure
- Wireless camera shutter, can be fixed on the joystick of a slit lamp

### Compact and Flexible

- Possible to be attached on majority of slit lamps
- Can be used either on desktop or handheld
- Take along anywhere in a briefcase



# FUNCTIONS

DEA provides complete dry eye tests according to the recommendation of **TFOS DEWS II** report.

## Symptomatic Evaluation

- DEQ-5

## Diagnostic Tests

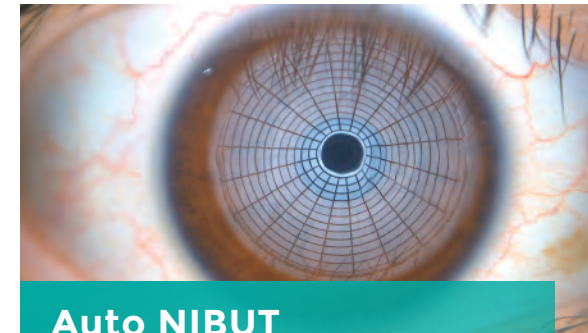
- Break-up Time (FBUT, NIBUT)
- Corneal Staining

## Subtype Classification

- Meibography
- Interferometry
- Tear Meniscus Height (TMH)

## Extra Exams

- Redness
- Blepharitis



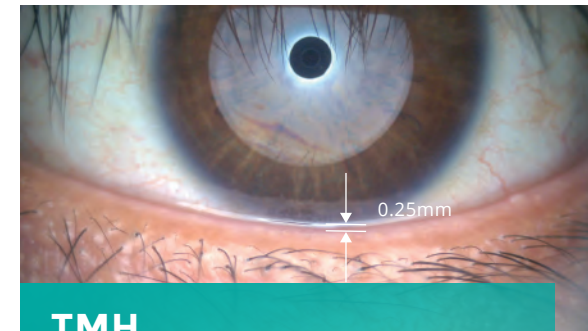
### Auto NIBUT

Automatically analyze break-up area, first and average break-up time for tear stability evaluation.



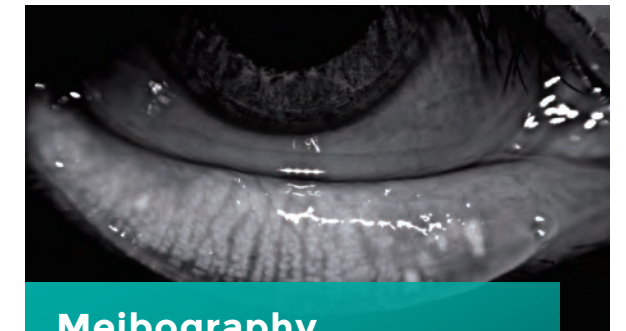
### Interferometry

Record a video of blinking process to observe the surface reflection pattern and dynamics of the tear film.



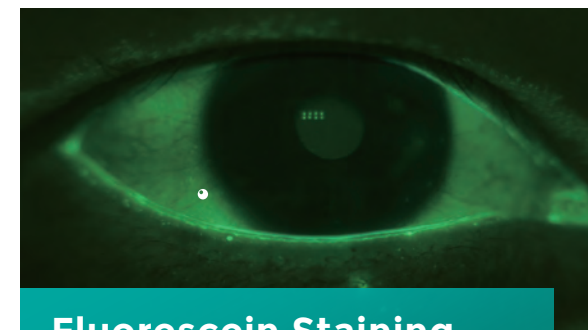
### TMH

Evaluate tear meniscus height that is observed on the eyelid margins. Up to 5 measurement points can be taken.



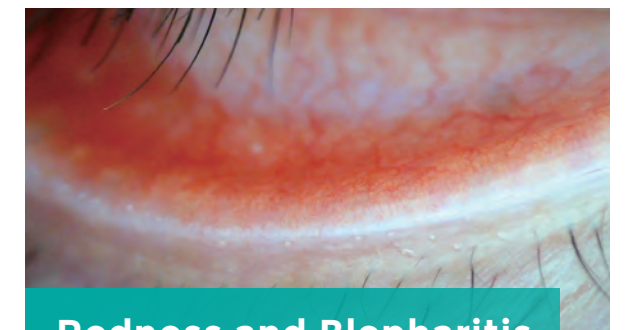
### Meibography

Evaluate the meibomian glands with infrared light. The software provides automatic evaluation of loss area.



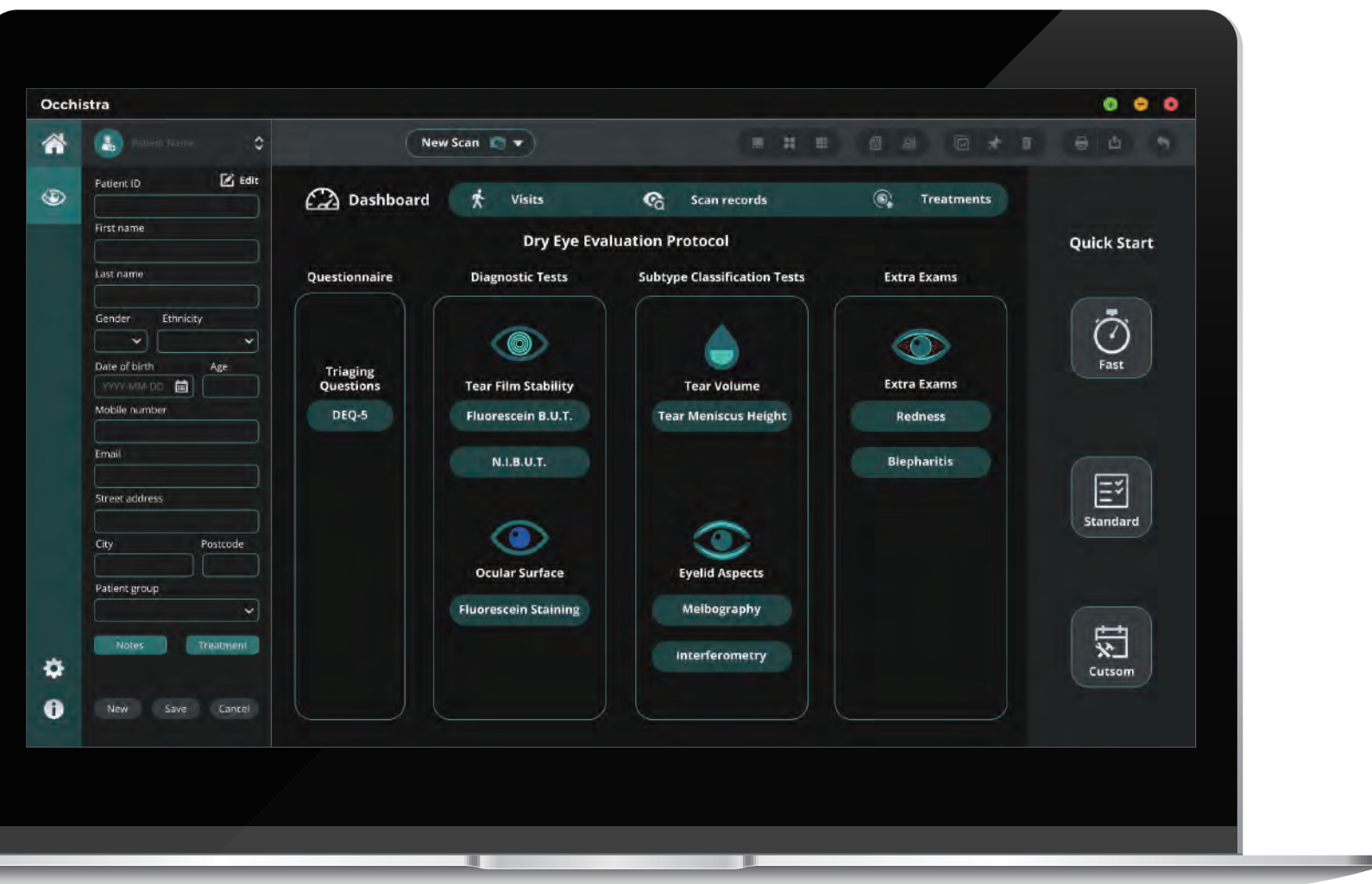
### Fluorescein Staining

Evaluate the areas of damage on the ocular surface after application of the fluorescein dye.



### Redness and Blepharitis

Observe the openings of meibomian glands, base of eyelashes, and eyelid edges and ocular surface.



# REPORT

The DEA software provides various single-page, color-coded dry eye report layouts, which are easy to understand and interpret.



# THE SYSTEM

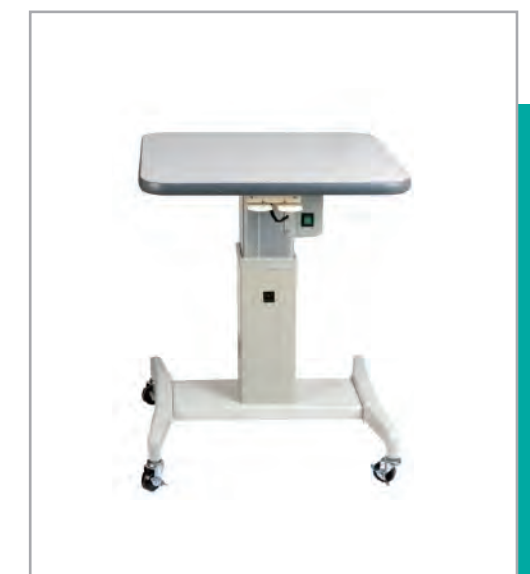
The product package includes: DEA, lenses, wireless camera shutter, slit lamp adaptors, meibomian gland evaluating tool, lens case, briefcase.



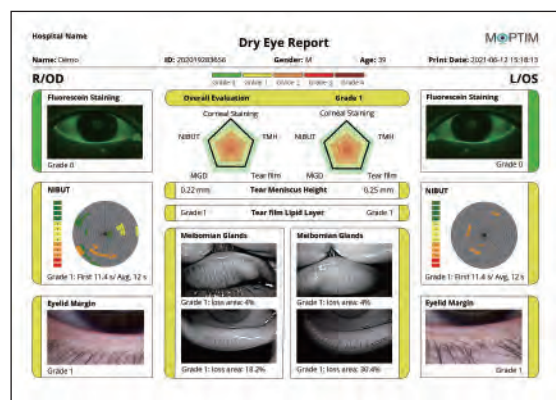
## Optionals



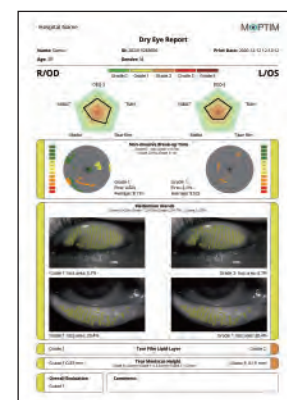
Desktop holder



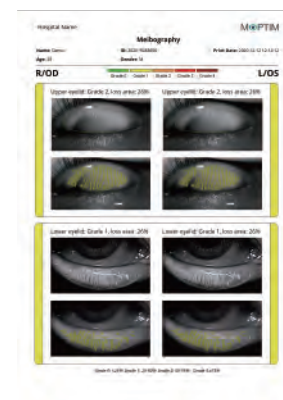
Instrument table



Complete DED Report



Brief DED Report



Binocular Report

# SPECIFICATIONS

## IMAGE AND VIDEO ACQUISITION

<b>Image Resolution</b>	8,000,000 pixels
<b>Image Dimensions</b>	3864 x 2218 pixels JPEG
<b>Acquisition Mode</b>	Multi-shot photos, video
<b>Focus and Exposure</b>	Manual and automatic
<b>Covering Area</b>	Maximum 8 mm
<b>Camera</b>	Colored, sensitive to infrared
<b>Light Source</b>	Infrared LED, Blue and white LED

## GENERAL INFORMATION

<b>Working Distance</b>	5 mm - 50 mm
<b>Ports</b>	USB 3.0
<b>Power Supply</b>	5 V
<b>Dimension</b>	170mm (H) x 54mm (W) x 64~110mm (L)
<b>Weight</b>	427g (including main body, 4 lenses and 1 wireless camera shutter)
<b>Accessories</b>	Standard: wireless camera shutter, lenses, briefcase, lens case, slit lamp adapter Optional: complete holder, instrument table

## SOFTWARE AND DATA MANAGEMENT

<b>Operating System</b>	Windows 10 64 bit
<b>System Requirement</b>	Intel core i3, RAM 8GB, hard disk 200G, screen resolution: 1920*1080
<b>Exams</b>	DEQ-5, Fluorescein staining, NIBUT, FBUT, interferometry, meibography, tear meniscus height, redness, eyelid margin
<b>Incorporated Grading Scales</b>	Efron Grading Scales

Specifications are subject to change due to product improvement.

M<sub>OPTIM</sub><sup>®</sup>



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