# Cobra HD
NON-MYDIATRIC FUNDUS CAMERA



## NON-MYDIATRIC FUNDUS CAMERA

**cobra HD** is a non-mydriatic digital fundus camera that comprises all the functions required for a rapid screening of the status of the retina. Cobra uses an innovative optical system that can provide high quality images of the ocular fundus.

With its ergonomic design Cobra provides a clear and detailed image of the ocular fundus with a field of vision of up to 50 degrees. Cobra uses a minimum flash exposure, allowing a fast and detailed acquisition of the fundus and minimizing the discomfort for the patient.

Cobra HD shares the use of the CCD high-resolution sensor (5 megapixel) for the alignment of the patient (with IR illumination) and the capture of retinal images (with a white light flash and IR LEDs). The USB connection between the device and the PC enables a fast and easy transfer of the images.

Patient data is saved in the Phoenix patient management software system in a stand-alone configuration or in a network: it is also possible to activate a DICOM connection to transfer images.
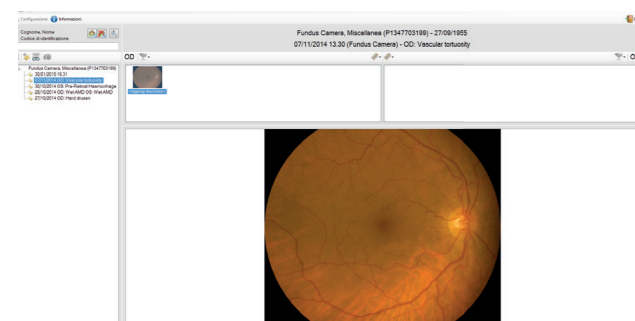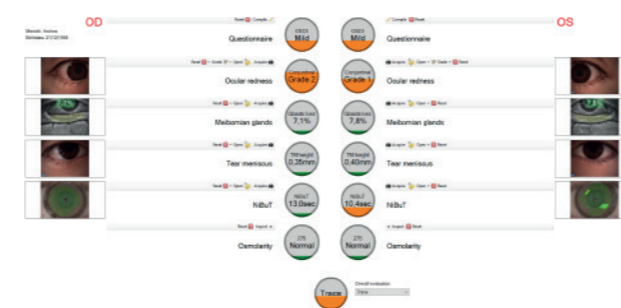
## FEATURES OF THE SOFTWARE PHOENIX
Cobra HD uses the Phoenix software platform allowing patient data to be saved for future review and analysis, shared by all CSO devices.
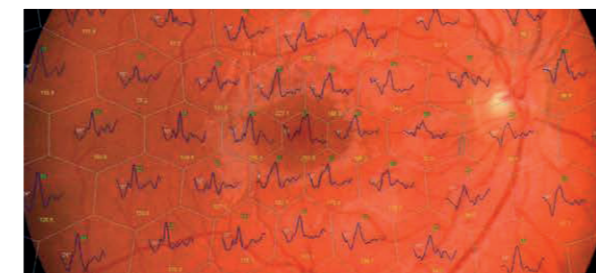




## DRY EYE
Based on the Ocular Surface Disease Index questionnaire (OSDI), Ocular redness limbal and conjunctival Hyperaemia, Meibomian glands analysis, Tear meniscus analysis, NIBUT, and Tear osmolarity calculated merging together all partial scores, provides an owerall evaluation of the clinical condition of the pacient for a conprensive diagnosis of the dry eye disease.



## INTEGRATION TOOL WITH ERG TEST*
The image of the retinal fundus provided by COBRA can be combined with the multifocal ERG test, performed with the RETIMAX device. This new module provides a precise indication of the functionality of every analyzed retinal area; it is very useful for the diagnosis and the follow-up of Macular Degeneration as well as degenerative hereditary retinal diseases.
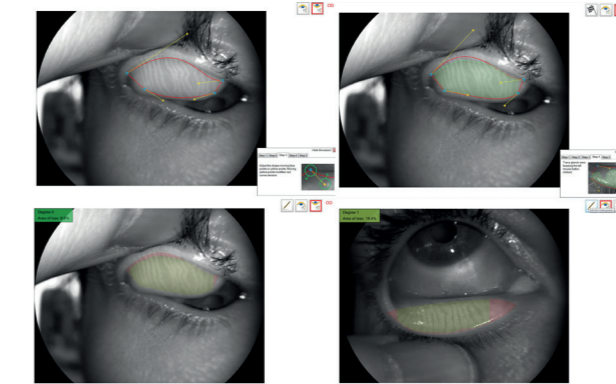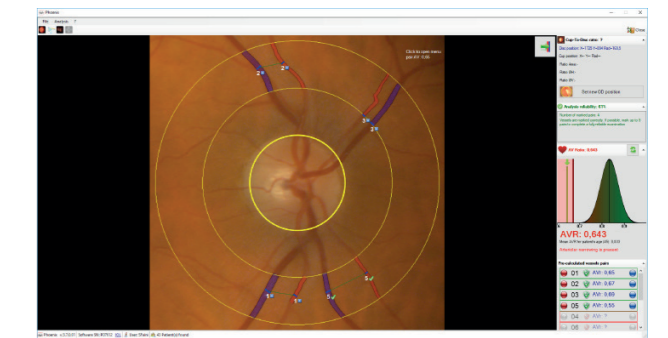


*optional module

## MGD ANALYSIS MODULE (MEIBOGRAPHY)
Cobra HD includes a module for the analysis of the Meibomian Glands (MGD). Using Pheonix software, the glands structure and health can be analysed.
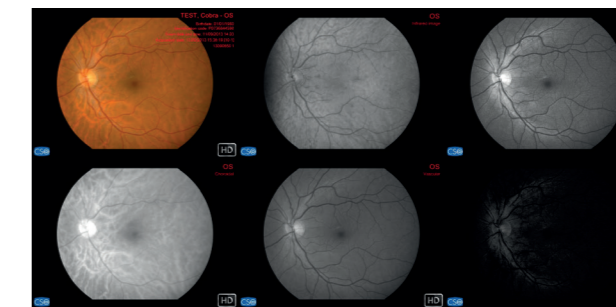


## AVR EVALUATION MODULE (OPTIONAL)
The AVR tool measures the relationship between the branch arteriolar-venous diameter. A low relationship between the dimension of the vessels, may be predictive of cardiovascular problems in adult patients.
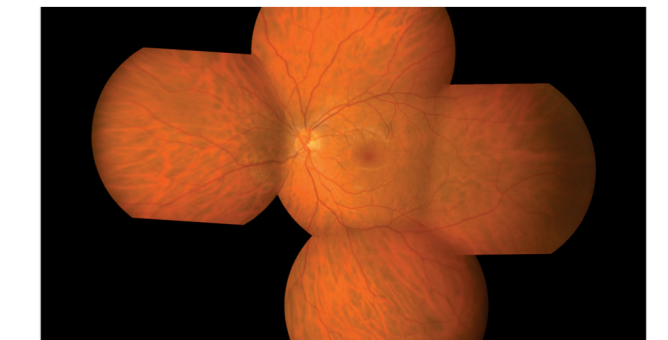


## MULTIPLE WAVE-LENGTH IMAGES
Multiple wave-length images can be displayed on one screen: the original image, infrared image, red-free image, as well the choroidal, vascular and nerve fiber image.



## MOSAIC FUNCTION
Cobra HD allows the acquisition of multiple images, to create a panoramic image of the peripheral retinal areas.
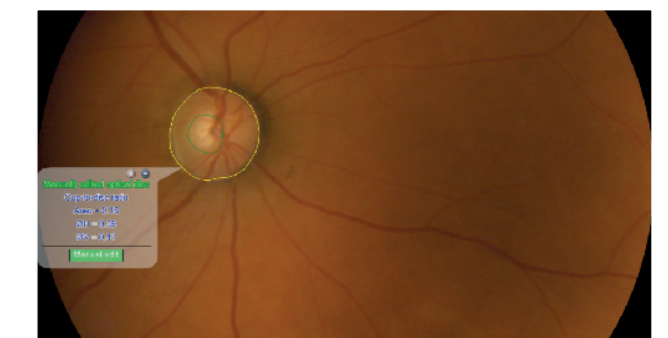


## INFRARED IMAGE ACQUISITION
The image is acquired using a low flash level and infrared light, producing a very detailed image of the retina.



## CUP TO DISK MEASUREMENT
The measurement of the Cup to Disk ratio is easily acheived using the built in measurement tools that are available in the Phoenix software platform for the detection of glaucomatous disease.

# Cobra HD
## NON-MYDIATRIC FUNDUS CAMERA

## TECHNICAL DATA

| | |
|---|---|
| Data transfer | USB 3.0 |
| Power supply | external power source 24 VCC<br>In: 100-240Vac - 50/60Hz - 0.9-05A - Out: 24Vdc - 40W |
| Power net cable: | IEC C14 plug |
| Dimensions (HxWxD) | 420 x 315 x 255mm |
| Weight | 6Kg |
| Chin rest movement | 70mm ± 1mm |
| Minimum height of the chin cup from table | 23cm |
| Base movement (xyz) | 105 x 110 x 30mm |
| Working distance: | 20mm |

### *LIGHT SOURCES*

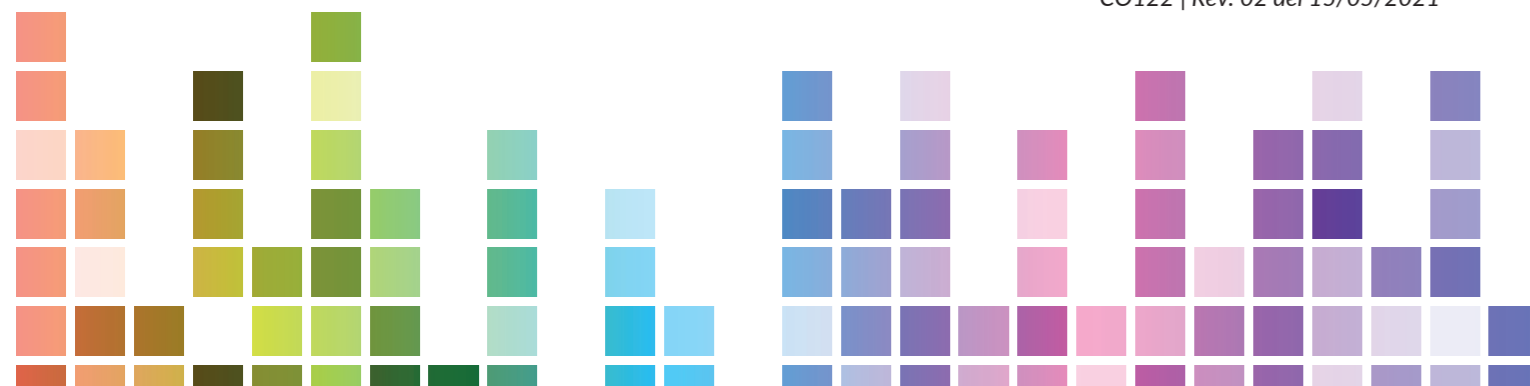| | |
|---|---|
| Auxiliaire IR | Led @850nm |
| White flash | Led @450-650nm |

### *RETINOGRAPHY*

| | |
|---|---|
| Spherical correction | from -20D to +10D (through handle placed on the optic head) |
| Image resolution | 2448 x 2051 (5MPixel) |
| Vision field | 50° x 45° |
| Minimum pupil size | 2.5mm |
| Compatibility with standard | UNI EN ISO 10940:2009, DICOM v3 (IHE integration profile EYECARE Workflow) |
| Fixation points | 1 internal + 1 on the chin rest |
| Compatibility with standard | DICOM v3 (IHE integration profile EYECARE Workflow) |

## MINIMUM SYSTEM REQUIREMENT

PC:  4 GB RAM  - Video Card 1 GB RAM (not shared) resolution 1024 x 768 pixels - USB 3.0 type  A
Operating system: Windows XP, Windows 7 and Windows 10 (32/64 bit).

*The specifics and the images are not contractually binding and can be modified without notice. Windows® is a Microsoft Corporation trade mark.*

*CO122 | Rev. 02 del 15/05/2021*



## CObra HD
## NON-MYDIATRIC FUNDUS CAMERA

# CSO
## *YOUR PROFESSIONAL PARTNER SINCE 1967*

CE 0051

EN