

The New SIGNAL Handheld Retinal Camera



The SIGNAL handheld retinal camera is a versatile addition to the Topcon Imaging line. The SIGNAL is a mobile imaging solution to bring to different exam rooms or home settings. The SIGNAL handheld retinal camera offers true color fundus images for detailed retinal examination.

Imaging

The SIGNAL enables non-mydriatic retinal examination with a 50° x 40° field of view, covering the macula and the disc. True color images and videos offer excellent screening and documentation of the retina. The nine fixation targets offer both central as well as peripheral imaging.

Portability

The SIGNAL is ultra-lightweight and compact. The whole system fits into a smart looking carrying case. The eye care specialist can visit bedridden patients in nursing homes, or at their own home. The SIGNAL has an operating time of approximately 5 hours of continuous use. Images can be uploaded if WiFi is available or can be stored on the SIGNAL's embedded memory.

Ease of Use

The auto focus function of the SIGNAL assures easy and fast image acquisition. In combination with the Topcon slit lamp adapter, positioning and alignment becomes even more effortless. Intuitive icons give access to easy to use menus in the camera.

Pediatric and Geriatric Ophthalmology

Infants, small children and elderly patients are sometimes difficult to capture with a stationary retinal camera. The maneuverability of the SIGNAL makes it easier to take images of a difficult to image child. The IR focusing beam helps children feel comfortable due to the low brightness and intensity. Elderly patients can be screened easily in a reclined or lying position.

Slit Lamp Mount

Slit lamps are standard instruments in most clinics. The SIGNAL can be quickly and easily mounted on a slit lamp adding fundus imaging to the patient workflow.



CAMERA SPECIFICATIONS

Model:

- SIGNAL Camera

Illumination:

- Infrared LED for aiming. Visible white LED for imaging, 10 illumination brightness levels. 9 red LEDs for internal fixation targeting

Maximum luminance:

- 3.0 cd/cm²

Field of view:

- 50°x40°

Diopter compensation:

- from -20 D to +20 D

Image resolution:

- 2368 x 1776 pix (total 4.2 Mpix, effective area 3.38 Mpix)

Spectral output at working distance:

- White and Infrared LED when operated in continuous mode

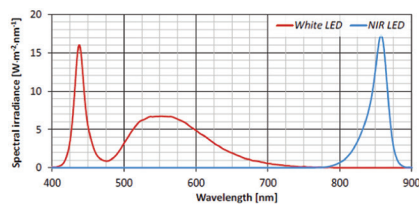


Image sensor:

- CMOS, 5.0 Megapixels

Image memory type:

- Internal 8 GB memory

Display:

- 4", TFT-LCD, 800x480 pixels, 16.7 M colors

Image format:

- JPEG (file extension: .jpg)

Video format:

- MPEG-4 (640 x 480)

USB Connectivity:

- USB 1.1, compatible with USB 2.0 and 3.0

WLAN Connectivity:

- 802.11 bgn, wpa2
- Operating frequency range: 2412 - 2472MHz (Channels 1-13)
- Modulation: OFDM (802.11 a/g/n), DSSS/CCK (802.11b)
- Maximum output power: 17.25 dBm
- Maximum antenna gain: 1.9 dBi

Operating systems:

- Microsoft Windows 7*, Windows 8.1*, Windows 10* (WLAN and USB)
 - MacOS (three latest versions) (USB)
- No driver installation needed.

Dimensions:

- 127 (w) x 202 (h) x 240 (d) mm

Weight:

- 785 g

Batteries:

- 50001508, 3.65V, 2750 mAh
- Rechargeable Li-Ion battery
- Li-Ion cell with integrated safety circuit.



The SIGNAL has an operating time of approximately 5 hours of continuous use per battery.



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Topcon Europe Medical B.V.

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