**FEATURE**                  **SPECIFICATION**

**Illumination**                  **Infra-Red LED for aiming. Visible white LED for imaging.**

**Maximum luminance**                  **3.0 cd/m²**

**Field of view**                  **50° x 40°**

**Minimum pupil diameter**                  **Ø 3.1 mm**

**Diopeter 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 Infra-Red 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 b/g/n, wpa2
• Operating frequency range: 2412 – 2472 MHz (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**                  **• Windows 8.1®, Windows 10® (WLAN and USB)
• macOS (three latest versions) (USB). No driver installation needed.**

**Dimensions**                  **27 mm (w) x 202 mm (h) x 240 mm (d)**

**Weight**                  **785 g**

**Battery**                  **• 50001508, 3.65V, 2750 mAh
• Rechargeable Li-Ion battery
• Li-Ion cell with integrated safety circuit.**
The Signal hand-held retinal camera, is a versatile addition to the Topcon Imaging line. The Signal is a mobile imaging solution for use in different exam rooms or home settings. The Signal hand-held 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. It is not necessary to dilate pupils. True color images and videos offer excellent screening and documentation of the retina. The nine fixation targets offer both central and peripheral imaging.

**Imaging Modalities**

The Signal hand-held retinal camera has several imaging modalities such as true color fundus imaging, Infra-Red (IR) imaging, Red-Free and Low-Red imaging.

**Portability**

The Signal is ultra-lightweight and compact and comes in a smart carry 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 2.5 hours of continuous use. Images can be uploaded if WiFi is available or can be stored on the Signal embedded memory.

**Ease of Use**

The auto-focus function of the Signal ensures 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 menu options in the camera.

**Flexible and Mobile Acquisition**

Some patients are difficult to capture with a stationary retinal camera. The maneuverability of the Signal makes it easier to take images of an un-cooperative patient. The invisible IR light source does not distract the patient due to the low brightness and intensity and is more acceptable to children and light-sensitive patients. Elderly patients can be screened easily in a reclined or lying down position.

**Slit Lamp Mount**

A Slit Lamp is a standard instrument in most clinics. The Signal can be quickly and easily mounted to a Slit Lamp, adding fundus imaging to the patient workflow.