IMAGEnet i-base

CONNECTING VISIONS

TOPCON
Complete **software solution**

**IMAGEnet i-base:**

**Introduction**

Topcon's IMAGEnet i-base is your complete solution for image and instrument data capturing, processing and storing. The system is designed for all professionals working with clinical information that needs to be taken care of in a logical and secured way. Topcon IMAGEnet i-base is developed to run seamlessly with the extended range of Topcon medical equipment such as Topcon Retinal cameras, Slitlamps and Topcon Refraction instruments. With the user-friendly layout, you have full control of every instrument and with a few mouse clicks you can analyze and organize the instrument data.

**Basic Module**

The Basic Module forms the basis to which specialized modules can be connected. It forms the framework of the IMAGEnet i-base system. Besides support for the Topcon Retinal camera's characteristics of the framework include:

- Modern standardized database for all patient and instrument data.
- The IMAGEnet i-base Software can be translated into your local language.
- The names of user interface fields can be changed to local requirements.
- Very user-friendly toolbars guide you through the required actions.
- The windows for captures and viewing images are TAB based which provides a good overview on the data that is open.
- Tools for manipulating the images are available like sharpening and contrast adjustment.
- Users and Groups are managed with an extended authorization module.
- Tools for (automatic) backup and archiving are part of the software installation.
- Multi-media support for all commonly used image and movie formats, including JPG, TIFF, PCX, EPS, WPG, PNG, BMP, AVI and MPG.
**Advanced Module**

An important feature of the Advanced Module is that it allows other modules and plug-ins to be connected to the IMAGEnet i-base system. Besides that there are several additional features that make this a very valuable addition to your i-base system:

- Easy way to make Compositions of the images that are captured and to store those compositions without losing any details of the individual images.
- Captures are patient orientated and captures of different cameras or instruments are taken into one capture window.
- Advanced imaging tools are available with the special Image Tool window.
- Images and data are represented by Thumbnails for easy recognition and manipulation.
- Specific modules can be used to extend the Advanced module even further with for instance the Cellcount module or Automatic Mosaic module in combination with the TRC-NW6S.
- Support for camera’s (including Nikon, Fuji and Canon) is done with plug-ins.

**Tele-medicine Module**

Exchanging data (images, patient data etc) between different i-base systems using so called Patient Packs is the most important feature of the Tele-medicine module. This exchange is needed when different persons on separate locations evaluate the medical data, for instance in diabetic screening.

- The data is send in XML format using “Patient Packs” that are encrypted and compressed.
- Fully user customizable grading forms.
- Dedicated grading facilities for diabetic screening setups.
- Multiple graders are supported in one system.
- Reports can be generated individual or in batch mode (for more than one report). Reports and letters are based on Microsoft Word Templates, which can be created and modified by the user.
**Refraction Module**

This module supports all Topcon Refraction and other instruments.

- Data formats include Subjective, Objective, Final, Tonometer and Lensmeter data.
- The following types of instruments can be connected: Lensmeters, Refractometers, Kerato Refractometers, Vision testers and Tonometers.
- Special optional lens fitting software supported, which includes a full database with the most common lens manufacturers.
- Communication with the Topcon computerized phoropter operation software is provided. Also is it possible to use previously obtained data as a starting point for further operations.

**Eye-Doctor Module**

This module adds all required functionality to use i-base in a clinical environment.

- Support for timers for Fluorescein and ICG
- Procedure support
- Measurement in mm and mm2
- Support mydriatic camera's
- Support for high-end camera's like Megaplus II serie
- More advanced imaging tools
- Advanced query possibilities on database
Complete patient management functionality
Basic imaging
Full database access

Advanced imaging tools
Suitable for camera plug-in
Flexible composition of images and data
Suitable for connection to mosaic module and cupdisk ratio module
Thumbnail selection and view

Connection to devices for capturing objective and subjective refraction data
Connectable to lensmeters, (kerato) refractometers, visiontesters, tonometers and corneal analysers

Flexible and user configurable grading forms
Reporting based on Word templates
Automatic report generation

Timer support
Measurement
Database Queries
Support high-end camera’s
**IMAGEnet i-base technical Specifications**

<table>
<thead>
<tr>
<th><strong>Software</strong></th>
<th>Developed under the Microsoft .Net environment using C++ and specialized user interface and image manipulation libraries</th>
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</thead>
<tbody>
<tr>
<td><strong>Supported OS</strong></td>
<td>Windows XP SP2, Windows 2000 SP4</td>
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<tr>
<td><strong>Database</strong></td>
<td>Microsoft Desktop Engine or Microsoft SQL Server Audit trail available</td>
</tr>
<tr>
<td><strong>Data formats</strong></td>
<td>Using XML or INI file formats</td>
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<tr>
<td><strong>Data exchange</strong></td>
<td>Compressed and using strong encryption</td>
</tr>
</tbody>
</table>
| **Authorization** | Three layered authorization model using:  
  - Windows Authorization Level  
  - SQL Server Authorization Level  
  - IMAGEnet i-base Authorization Level  
  Authorization is done using Users, Groups and Rights |

| **User Interface** | Implemented with a Library providing full and native Windows XP look and feel. Features include:  
  - Toolbars,  
  - Toolbars, iconized menu items, shortcut bars  
  - Tabbed MDI interface  
  - Thumbnail view and floating, dockable dialog windows |

**Minimal PC requirements**

| **Processor** | Pentium 4 |
| **Memory** | 1024 Mb |
| **Harddisk** | 100 Gb |
| **Graphical board** | Capable of resolution 1024x768, 32bits |
| **CD/DVD** | CD-reader |

* Subject to change in design and/or specifications without advanced notice.

**IMPORTANT**

In order to obtain the best results with this instrument, please be sure to review all user instructions prior to operation.