SP-1P
Specular microscope
The next generation in specular microscopy

The Topcon specular microscope SP-1P introduces a modern ergonomic design and innovative features that simplifies its use and increases its efficiency. A large 10.4 inch rotatable touchscreen eliminates the need for a control lever, and can be turned to various angles for better interaction with the patient.

By simply tapping on the center of the patients’ pupil displayed on the monitor, the SP-1P automatically centers, focuses, acquires and analyzes the endothelial cell image. The entire operation takes a few seconds and it is fast and smooth, requiring minimum training.

The SP-1P offers space saving features and has a very easy to use interface.
Features

- Compact and stylish design
  - 10.4 inch rotatable touchscreen

- Quick automatic measurement and analysis
  - Instant acquisition of the analysis results
  - Intuitive operation

- Panorama photography function
  - Substantial size increase of the analyzed area

- Easy report
  - Built-in printer
  - Export to storage

- Two photography modes
  - Sequence mode
  - Free style mode

- Easy to read screen and comprehensive analysis software
  - Frequently referred values are shown on top
  - A pleomorphic / polymegathic histogram can be shown with color
Features

Compact and stylish design
Topcon specular microscope SP-1P offers comfort for patients, ease of use, and increased operation speed. The SP-1P can be placed against the wall, because of the rotatable touchscreen.

Quick automatic measurement and analysis
The SP-1P photographs and displays analyzed data by simply tapping the screen. All functions, alignment, photography and analysis are quickly performed automatically.

Panorama photography function
The ‘panorama’ function takes three images in three different areas: central, nasal and temporal and automatically combines them creating a larger area for the observation and analysis of endothelial cells*. Compared to conventional analysis, this larger area of cells allows for a faster and more complete evaluation of the patients’ endothelium condition. The ‘panorama’ function is especially useful when the cells of the patient are decreased and the available number of cells is limited. The increased analyzed cells improve on the reliability of the examination result.

* The analysis of combined images is available after photographing a minimum of 2 areas (center and either adjacent nasal / temporal).
Features

**Single**

**Panorama**

**Easy report**

Sample report
After photography the report will be transferred to the selected storage location.

**Sample printout**
Direct printout from the device.
Features

Two photography modes
The SP-1P offers two photography modes. The examiner can select between sequence mode and free style mode.

Sequence mode
The examiner can enter patient information prior to photographing and then perform the photograph and analysis of the different areas of the cornea. This ensures that all necessary information on the patient is saved.

All operation can be done by the touchscreen, simply by following the instructions.

Free style mode
Immediately after turning on the device, the examiner will be able to take pictures. Even during the examination, the examiner can change or add the area to be photographed which allows a more flexible and quick analysis.
**Features**

**Easy to read screen**

**Examination screen**
- Patient No. / ID
- Examiner ID
- Set-up

![Examination screen image](image1)

**Display analyzed result**
- Examine
- Print / Output
- Manual editing
- Overlay
- Next

![Display analyzed result image](image2)

**Comprehensive analysis software**

All relevant values such as corneal thickness (CCT), cell density (CD), coefficient of variation (CV) and percentage of cell hexagonality (HEX) are displayed in large font size on top of the measurement screen. By tapping the overlay button at the bottom, the analysis graph can be changed to a pleomorphic or polymegethism histogram.

**Single**

![Single image](image3)

**Panorama**

![Panorama image](image4)
### Specifications

**Corneal endothelium photography**
- **Photography magnification**: 254x (on the control panel)
- **Photography range**: 0.25 mm x 0.55 mm
- **Revolving power**: More than 125 line/mm
- **Fixation target**: Central and (semi) peripheral

**Corneal thickness measurement**
- **Measurement range**: 0.400 - 0.750 mm
- **Display unit**: 0.001 mm step display

**Other specifications**
- **Dimensions**: 286 - 468 mm (W) x 445 - 592 mm (D) x 486 - 681 mm (H)
- **Weight**: 17 kg
- **Power supply**: Source voltage 100-240V AC, 50-60Hz
- **Power input**: 70-120VA

*Corneal thickness is measured only when taking a photograph using the central fixation target.

### System chart

![System chart](image)

- **Specular Microscope SP-1P**: LAN
- **Server**: LAN
- **Ophthalmic data system IMAGEnet\textsuperscript{®}**: LAN
- **Other filing system**: LAN

---

**Important**
Subject to change in design and/or specifications without advanced notice.
In order to obtain the best results with this instrument, please be sure to review all user instructions prior to operation.
Medical device Class Im. Manufacturer: Topcon Corporation.

---

Topcon Europe Medical B.V.
Eendaan 7, 2950 U Capelle a/d IJssel, P.O. Box 145; 2900 AC Capelle a/d IJssel, The Netherlands
Phone: +31-(0)10-4580077; Fax: +31-(0)10-4580040
E-mail: medical@topcon.eu; www.topcon-medical.eu

Topcon Danmark
Plesemarken 25, 4500 Roskilde, Denmark
Phone: +45-46-327355; Fax: +45-46-327355
E-mail: info@topcon.dk
www.topcon.dk

Topcon Scandinavia A.B.
Norsaningatan 2, P.O. Box 25; 4516 Malmö, Sweden
Phone: +46-(0)30-709300; Fax: +46-(0)30-709309
E-mail: medical@topcon.se; www.topcon.se

Topcon España S.A.
HEAD OFFICE: Frederic Mompou, 4; 08960 Sant Just Desvern, Barcelona, Spain
Phone: +34-93-4734077; Fax: +34-93-4739392
E-mail: medical@topcon.es; www.topcon.es

Topcon Italy
Viale dell’Industria 60; 20037 Paderno Dugnano, (MI) Italy
Phone: +39-02-9966677; Fax: +39-02-9908009
E-mail: info@topcon.it; www.topcon.it

Topcon France Medical S.A.S.
Bât A31, 3 Route de la Filature, 92026 Saint Denis Cedex, France
Phone: +33-(0)1-46-02-23-21; Fax: +33-(0)1-46-02-23-24
E-mail: medical@topcon.com; www.topcon-medical.fr

Topcon Deutschland GmbH
Hanns-Martin-Schleyer Straße 41; D-47877 Wülft, Germany
Phone: (+49) 2544-885-0; Fax: (+49) 2544-885-177
E-mail: info@topcon-medical.de; www.topcon-medical.de

Topcon Polska Sp. z o.o.
ul. Warszawska 23; 42-470 Siewierz, Poland
Phone: +48-(0)32-670-50-45; Fax: +48-(0)32-670-34-05
www.topcon-poland.pl

Topcon Great Britain Medical Ltd.
Topcon House, Kenneth Side, Bone Lane, Newbury, Berkshire RG14 5PN, United Kingdom
Phone: +44-(0)1635-551120; Fax: +44-(0)1635-551170
E-mail: medical@topcon.co.uk; www.topcon.co.uk

Topcon Ireland
Unit 276, Blanchardstown, Corporate Park 2, Ballycoolin, Dublin 15, Ireland
Phone: +353-1-8970900; Fax: +353-1-8235910
E-mail: medical@topcon.ie; www.topcon.ie