

# CT-1 / CT-1P

Computerized Tonometer



## The Next Generation of Tonometry

Topcon, with its wealth of experience in designing and manufacturing high-performance non-contact tonometers since 1987, is proud to introduce the CT-1/1P\* non-contact tonometer. The CT-1/1P is more stylish and more compact than ever before. The flexible control panel enables the CT-1/1P to be installed in many different positions in the examination room. The CT-1/1P provides an innovative operation experience and eliminates the need for a control lever. By combining it with the Topcon Kera-to-Refractometer KR-1, built with the same concept, you will save space in your examination room. The air-puff mechanism ensures a soft air-puff and requires less maintenance and cleaning. The CT-1/1P is an innovative and high quality non-contact tonometer.

### Features

#### » Simple and Quick Operation

- R/L fully automated measurement
- Easy-to-Use Touch Screen Control Panel eliminates the need for control lever
- Additional Measurement Mode

#### » Flexible and Space Saving Layout

- The adjustable control panel can be positioned in any direction
- Compact Body

#### » Reliable Measurements

- New ergonomic optical head and headrest design
- Stable IOP measurement with soft Air-Puff
- Corneal thickness measurement for IOP compensation (CT-1P only)

Functionality & Aesthetics Combined  
in the **NEW CT-1/CT-1P**



## Bring Innovation to the Examination: CT-1/CT-1P

The CT-1/1P takes automated operation to a new level. Simply touch the center of the pupil on the touch screen control panel and the CT-1/1P automatically obtains right and left eye information immediately. The CT-1/1P provides an innovative operation experience and eliminates the need for a control lever.

### Simple and Quick Operation

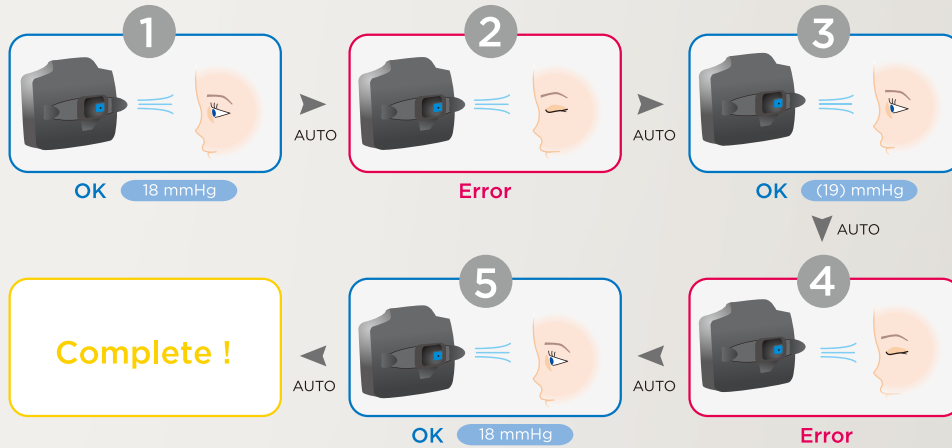
R / L fully automated measurement




## Additional Measurement Mode

The additional measurement mode will save time and prevent extra work & inconvenience. The CT-1/IP will continue to measure until the required preset IOP measurement count is obtained.

Ex.) In this case, the preset count is 3 times.



## Manual Mode

If required, the CT-1/IP can be set in a manual mode as well. Once the CT detects the pupil position, the movement will retain automated alignment and you simply press the Start button  to begin the measurement.

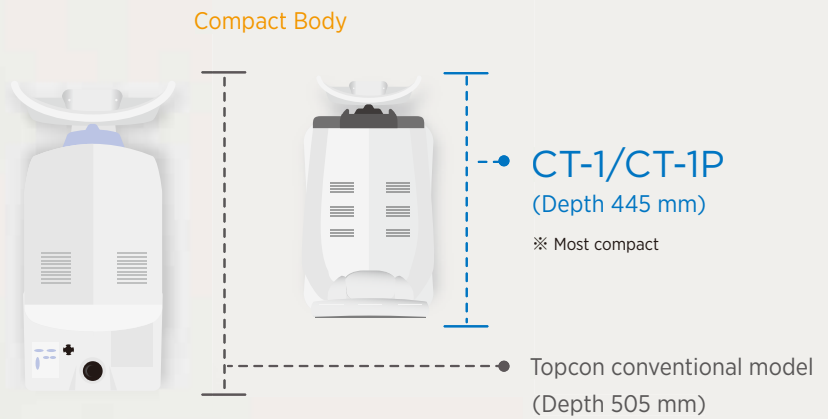
## Easy-to-Use Color Touch screen Control Panel

All operating procedures can be performed with the touch screen control panel. The sophisticated buttons provide an intuitive operator experience. The CT-1/IP automatically takes measurement of the right and left eyes quickly and easily.



## Flexible Layout and Space Saving Layout

The adjustable control panel allows the operator to position him or herself anywhere around a patient since the control panel can be faced in a number of directions. In addition, the compact body enables the operator to support the patient easily from many different positions during the measurement even when the patient's eyelid needs to be opened. These unique features will contribute to a space saving and flexible layout in your eye examination room, especially if combined with the Topcon KR-1 Auto Kerato-Refractometer.



When the KR-1 and CT-1/IP are positioned at 90 degrees, an operator and a patient have to turn just 90 degrees to complete both measurements.



## Soft Air Puff

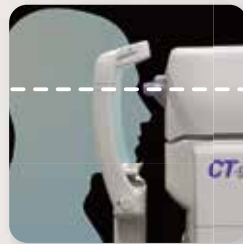
Good Point!

The soft air puff used for measurement leads to less stress and more comfort for a patient and better compliance during the measurement procedure. The improved software controls the amount of air required for each individual eye.

## New Compact Ergonomic Design

The CT-1/IP's new ergonomic design provides a more comfortable position for the patient with an inclined optical head (5°) and a new headrest design.

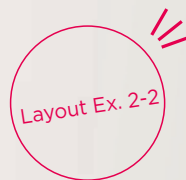
### Ergonomic Optical Head



Topcon conventional model



CT-1/CT-1P

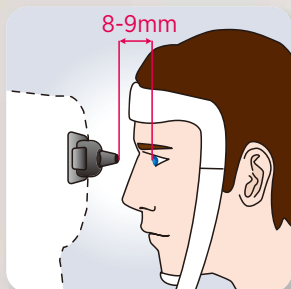


An operator just moves a few steps from the KR-1 to CT-1/IP while a patient just turns 180 degrees.



## Safety Functions

The CT-1/IP incorporates new safety functions which have been designed in a fully automated style. The instrument features an innovative safety function to keep the preset distance (ex.8-9mm) manually between the cornea and the nozzle, in addition to the “TOO CLOSE” notification on the screen and a buzzer alert if the cornea and the instrument are too close.



The safety distance can be manually adjusted very quickly and easily. Each patient and each eye needs to be adjusted before measurement.

## Reduced Nozzle Maintenance

The nozzle design of the CT-1/IP helps to prevent dust and debris from entering the chamber. This significantly reduces the need for cleaning and maintenance.



## Built in Printer

The CT-1/IP is equipped with a built-in thermal printer that can be easily loaded with a roll of paper. The CT-1/IP cuts the paper automatically at the end of printing.



(Ex.)

Printed report content:

Barcode: -CT 010017-

OID: JOHN SMITH 1

NAME

2012\_01\_01 AM 11:00  
NO:Patient ID 01  
SN:0000001

2 TONO. DATA

< R >		< L >	
mmHg	ADJ.	mmHg	ADJ.
12	12	12	12
13	13	10	10
13	13	11	11

4

AVG

12.5	12.5	11.0	11.0
------	------	------	------

< R > hPa ADJ. < L > hPa ADJ.

16	16	16	16
17	17	13	13
17	17	14	14

5

AVG

16.5	16.5	14.3	14.3
------	------	------	------

3 PACH.DATA

< R > mm	< L > mm
0.511	0.510
0.510	0.509
0.510	0.508

AVG

0.510	0.509
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TOPCON

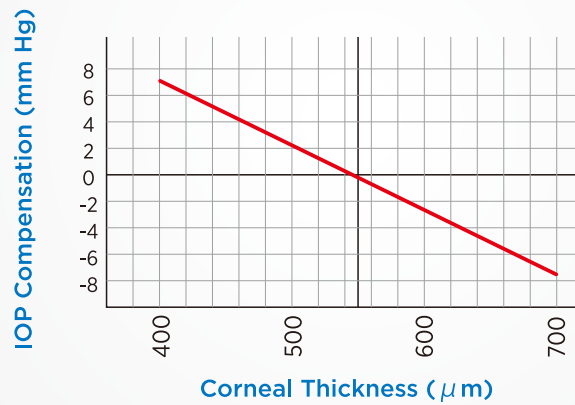
TOPCON Clinic 6

- 1 Operator ID
- 2 Measured value of intraocular pressure
- 3 Measured value of central corneal thickness
- 4 Measured value displayed in “mmHg” units
- 5 Measured value displayed in “hPa” units
- 6 Message column



## Corneal Thickness Measurements (CT-1P only)

The CT-1P provides compensated IOP values with central corneal thickness (CCT). Studies show that the CCT could affect IOP measurements, for example IOP values measured using a conventional tonometer are higher in eyes with a thicker cornea, and the diagnosis of normal tension glaucoma can also be affected by thin CCT.

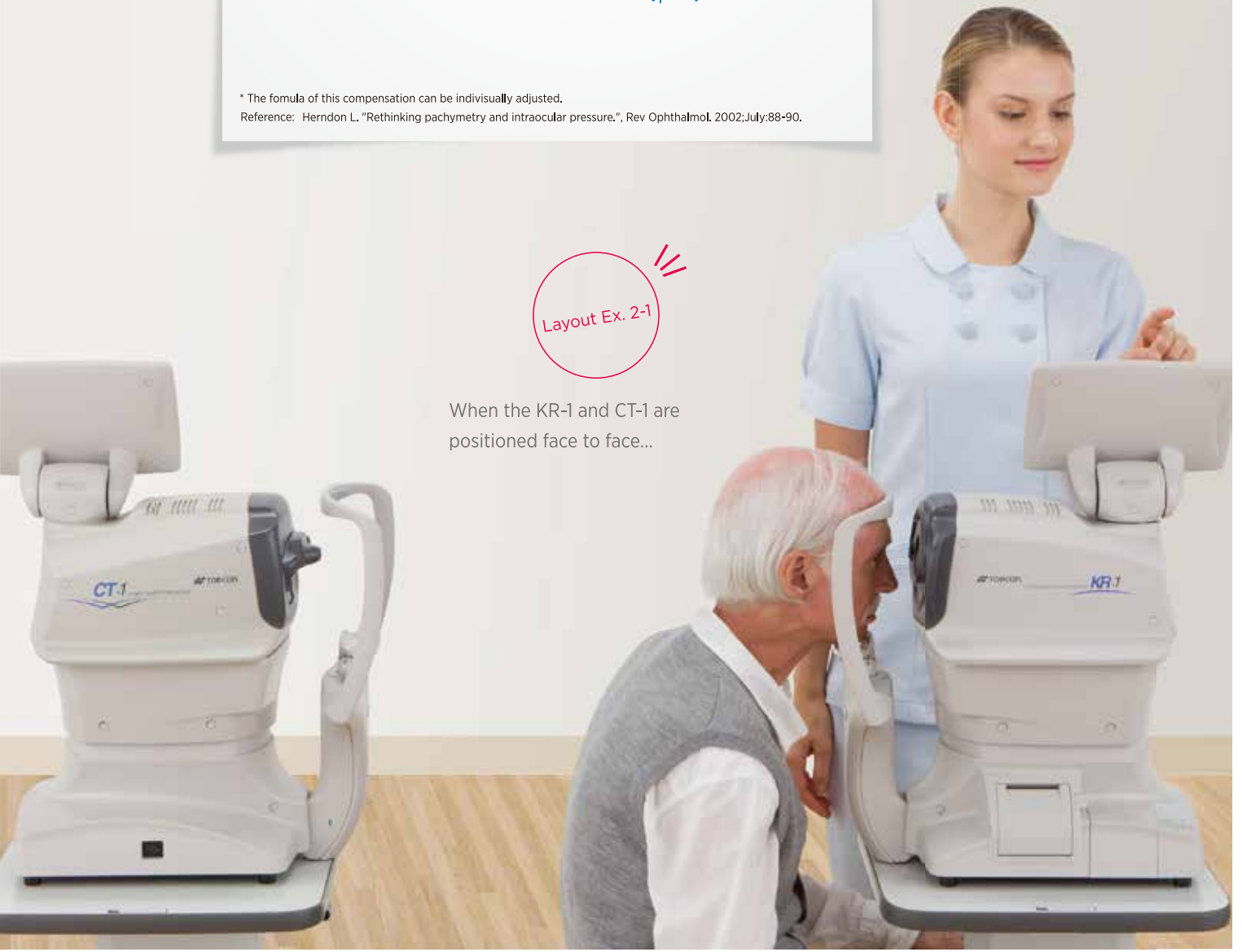


\* The formula of this compensation can be individually adjusted.

Reference: Herndon L. "Rethinking pachymetry and intraocular pressure.", Rev Ophthalmol. 2002;July:88-90.

Layout Ex. 2-1

When the KR-1 and CT-1 are positioned face to face...

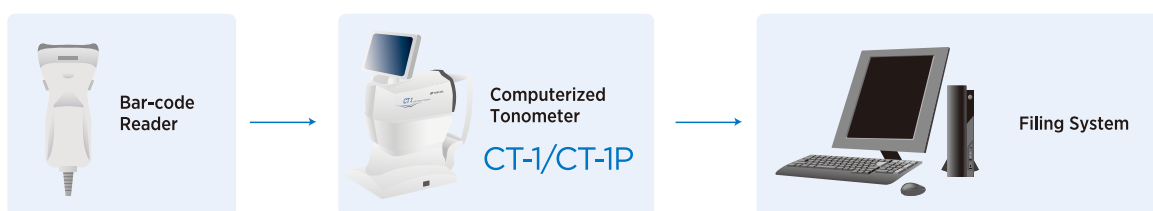


# Specifications

<b>Ocular Pressure Measurement Measuring Range</b>	1 to 30 mmHg / 1 to 60 mmHg ( 1 mmHg step ) Average Indication: 1mmHg/0.1mmHg steps changeable
<b>Corneal Thickness Measurement Measuring Range *</b>	0.4 to 0.75 mm ( 0.001 mm step )
<b>Monitor</b>	8.5" WVGA color LCD monitor, touch panel
<b>Data Transport Terminal</b>	USB ( Import ), RS232C ( Export ), LAN ( Export )
<b>Dimensions</b>	286 ~ 326 (W) x 445 ~ 526 (D) x 466 ~ 615 (H) mm
<b>Weight</b>	19.5 kg
<b>Power Supply</b>	100-240V AC, 50-60Hz, 75VA

\* CT-IP only

## System Chart



\* Contact Topcon subsidiaries or dealers for system configurations.

**IMPORTANT** In order to obtain the best results with this instrument, please be sure to review all user instructions prior to operation. Not all products, services, or offers are available in all markets. Contact your local distributor for country-specific information and availability.

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