

**Frey**

CE 1434



**Non-contact  
TonoPachymeter  
TNP-200**



CLEAN-AIR INNOVATION FROM FREY

Innovative clean air-system

Soft-air puff

Auto CCT measurement for IOP correction

Auto-adjusting & auto mode

LAN/ Wi-Fi connection & printer

The TNP-200 is the new benchmark TonoPachymeter.

Intelligent and innovative. Intuitive and easy

to use. Designed to optimize

patient safety and improve

cleanliness of the device.

CLair is a clever solution

for clinicians and their

patients.



TNP-200

# PATIENT'S IOP

## Tonometer. Pachymeter. One device, easy to use.

The FREY TNP-200 encompasses the seamless and compact integration of a non-contact tonometer and a pachymeter. The TNP-200 measures intraocular pressure (IOP) values automatically and reliably, thanks to accurate CCT (Central Corneal Thickness) results. The TNP-200 delivers precise and reliable corneal thickness measurement.

### Clair Unique clean air system

Clair, an innovative air puff system that keeps the air pathway clean. As nothing can enter the device, the probability of disease transmission between patients and the eyes is significantly reduced.

#### APA

Automatic Pressure Adjustment (APA) system is an intelligent air power matching solution that minimizes the patient's discomfort and adjusts the examination to their individual needs.

#### Fast one-click auto-measure

The TNP-200 is intuitive and effortless to operate, featuring a fully automated alignment system and measurement function. Pupil auto-tracking makes examination performance even easier.

#### Fully automated CCT measurement

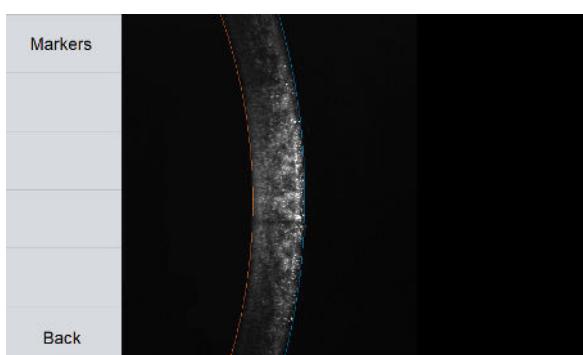
The pachymeter function allows clinicians to receive correct IOP results quickly and accurately. The TNP-200 can be easily programmed to suit the clinician's preferences. Choose between two correction methods: Dredner and Elsheikh.

#### Image preview

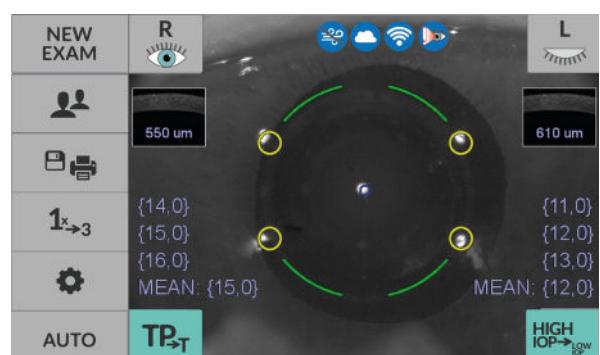
The TNP-200 image preview of pachymetry results are quickly accessible during the examination.

#### Wi-Fi & LAN connectivity

Connect to a local network via LAN or Wi-Fi for easy export and import of exams results.



An image of the cross-section of the cornea.



The main screen of TNP-200 is clear, intuitive and simple.

# CaAPAbility to adjust.

## How does the Automatic Pressure Adjustment (APA) feature enhance IOP diagnostics?

FREY have equipped the TNP-200 Tonopachymeter with an **Automatic Pressure Adjustment (APA)** system, to ensure patients feel even more comfortable with a tonopachymetry examination.

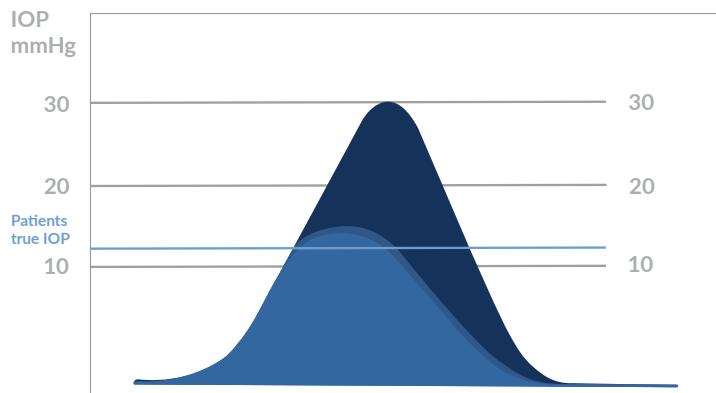
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APA is an intelligent and fully automatic system of air power matching.

The first puff of air diagnoses the pressure in the patient's eye. Then, the device analyzes the collected parameters and selects the power of subsequent puffs. The next two puffs, are made with strength, adjusted to patient's IOP.

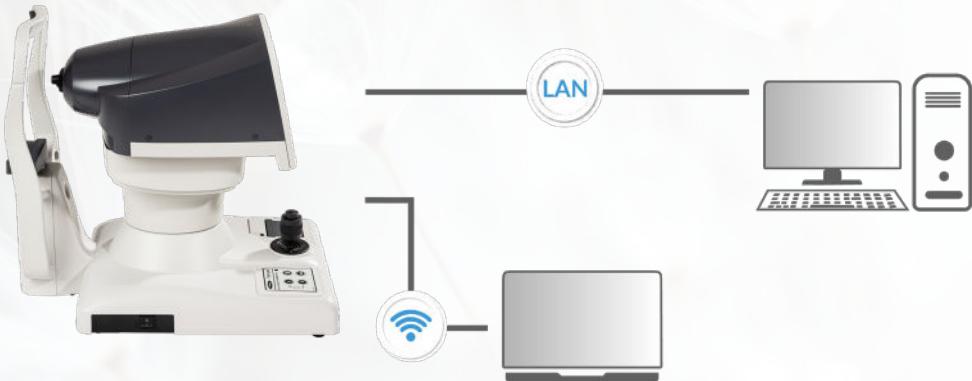
Thanks to the Automatic Pressure Adjustment, patient discomfort is minimized and the examination is adjusted to individual patient needs.

The TNP-200 with the APA function makes the test even more accurate and reliable.



Puffing pressure curves - APA system visualization.

## TNP-200 connectivity



## TNP-200 technical specification

Device type	TNP-200 Non-contact TonoPachymeter	
Measurement range	0 - 60 mmHg (0 - 80hPa), 150-1300 µm	
Measurement resolution	1 mmHg, 1 µm	
Main unit	Dimensions H/W/L	460 x 300 x 480 mm
	Weight	18 kg
Power source	100-240VAC 50/60 Hz	
Power consumption	Max 45VA	
Power supply unit	External, medical power supply adapter INPUT: 100-240V ~1,5A OUTPUT: 12V ==5A	
Printer	Built-in, thermal	
Display	7" colour LCD with touch screen	
Measuring unit travel distance	85 mm (X axis); 40 mm (Y axis); 50 mm (Z axis)	
Chin rest travel distance	69 mm (up/down)	
Chin rest	Electrically regulated (up/down)	
Storage devices	Internal flash	
Database capacity	Up to 3500 patients x 100 exams x 3 measurements (for each eye) Data format: XML	
Connectivity	Wi-Fi, LAN	