SINUSVIEW AIR · NIR SINUS TRANSILLUMINATOR

See inside the sinuses.
10 seconds. No radiation.

A desktop near-infrared device that gives primary care clinics an objective, repeatable view of the maxillary sinuses — at the point of consultation.



Radiation-free
Safe to repeat at every visit, for adults and children.

10-second exam
Fits into the consultation; operated by nurses or assistants.

Visual, quantified report
Left/right image and score the patient can see.

275,000+
Exams at Korean health-check centers

80+
Clinics and centers in Korea

93.3%
Specificity vs. CT (n = 225)

MFDS
Class I registered · India registered

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THE CLINICAL NEED

Primary care has no practical way to look inside the sinuses

Acute sinusitis is one of the most common reasons antibiotics are prescribed in outpatient care, yet most cases are viral and resolve without them. Guidelines already advise against routine antibiotics. The problem in the consulting room is that a clinician working from symptoms alone cannot tell which patient is the exception — and cannot show a patient who expects antibiotics why none are needed.

SinusView Air gives the clinician an image and a number to put on the screen, and gives the patient something to look at.

	CT	X-RAY	ENDOSCOPY	SINUSVIEW AIR
Radiation	Yes	Yes	None	**None**
Exam time	Minutes	Minutes	Minutes	**~10 s**
Repeat exams	Cost & dose	Not advised	Discomfort	**Unrestricted**
Operator	Specialist	Reader	Specialist	**Trained staff**
Primary care access	Low	Limited	Moderate	**High**

HOW IT WORKS

Light passes through air. Fluid holds it back.

1. **Bite the mouthpiece**

   The patient bites a covered intraoral mouthpiece and rests the face in the cradle. Adult and pediatric mouthpieces.

2. **NIR transillumination**

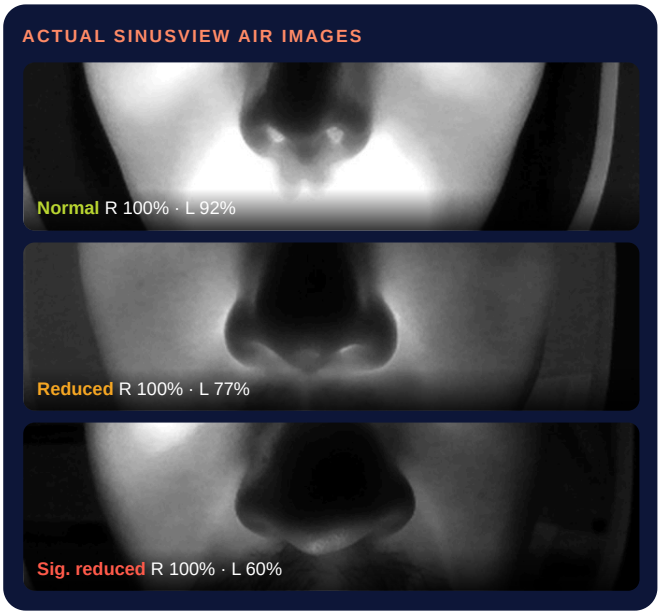
   850 nm near-infrared LEDs light the maxillary sinuses from inside the mouth. Air-filled sinuses glow; sinuses with fluid or mucosal thickening stay dark.

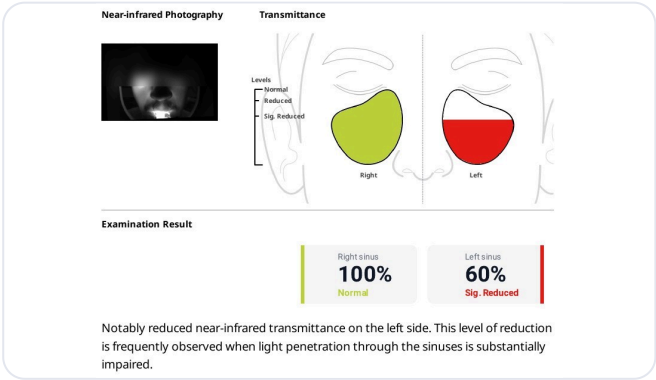
3. **Automatic positioning & quality check**

   Facial landmarks locate each sinus; built-in checks prompt one retake if fit or ambient light is off.

4. **One-page report**

   Left and right sinuses are each graded Normal / Mild / Severe with a transmittance score and the source image.





Bright cheeks indicate air-filled sinuses; a darker side indicates reduced transmission. Images cropped for privacy. Sample report: patient details removed. The grading formula was derived from large-scale real-world exam data and is locked on the device: the same image always gives the same result.

THE DEVICE

SinusView Air

Model	U2-SV-AIR26HW
Principle	Intraoral near-infrared transillumination
Light source	Single-wavelength NIR LED, 850 nm ± 20 nm
Mouthpiece	Adult (4 LEDs) / pediatric (2 LEDs); 400 exams per unit; firmware-authenticated
Sensor	CMOS camera (night mode)
Output	Left / right · Normal · Mild · Severe + score + image
Exam time	~10 seconds
Hygiene	Single-use cover film per patient; UV-C (275 nm) LED disinfection
Software	SinusViewer app (Android tablet / Windows PC), USB-C; works offline
Power	AC 100–240 V, 50/60 Hz
Size · Weight	214.5 × 321.6 × 440.6 mm · 3.5 kg





CLINICAL EVIDENCE

Prospective study vs. CT — Kosin University Gospel Hospital

Department of Otolaryngology, Busan, Korea · IRB-approved · 2020–2022 · SinusView v2.0 · CT read by the site's ENT department as reference standard · 225 patients analysed.

93.3%
Specificity

90.6%
Positive predictive value

When SinusView reports an abnormal sinus, CT agrees in about 9 of 10 cases. SinusView is an adjunct to clinical assessment and does not replace CT or endoscopy. Full results, including sensitivity and NPV, are available to partners on request.

Published research on intraoral NIR sinus imaging

The same principle has been studied independently at UC Irvine (Beckman Laser Institute & Dept. of Otolaryngology):

- Mahmood et al., *J Biomed Opt* 15(3), 2010 — NIR vs. CT, 21 patients
- Cerussi et al., *J Biomed Opt* 20(3), 2015 — light propagation modelling
- Coughlan et al., *Otolaryngol Head Neck Surg* 155(3), 2016
- Abouzari et al., *Ann Otol Rhinol Laryngol* 131(10), 2022 — prospective, 65 patients vs. CT

These studies used research systems, not SinusView.

IN PRACTICE

How Korean clinics use SinusView

> Showing the score fall between visits gives patients visible proof that treatment is working.
>
> **ENT clinic, Gyeonggi**

> Seeing how much the sinus is filled — and that it takes two to three weeks to clear — markedly improves medication adherence.
>
> **ENT clinic, Seoul**

> Used to separate simple rhinitis from sinusitis that may need antibiotics during the cold season.
>
> **Family medicine clinic, Seoul**

Summarised from clinic visits by U2MedTek staff, 2025. Clinics not named.

Where it fits

ENT · internal medicine · family practice · pediatrics · traditional medicine clinics · health-check centers

Business model

- **Device** — one-time purchase
- **Mouthpiece consumable** — 400 exams per unit, usage counted automatically, genuine parts only
- **No server required** — billing through consumables, suited to markets with limited connectivity

Intellectual property

6 registered Korean patents covering mouthpiece LED control, positioning, image acquisition, synchronisation and sinus-status determination · ROI-optimisation filed in EP, US, JP and CN (2026) · multi-sensor fusion filed in Korea (2026) · PCT application filed · device design registration granted (KR)

REGULATORY & QUALITY

MFDS (Korea)	Class I, No. 26-1067 — SinusView Air	Sep 2026
ISO 13485	RMDM0047	to 2028
Korea GMP	KTR-ABBA-21797	to 2027
India	Class A, via local partner	Oct 2026
Indonesia	BPOM, via idsMED	Dec 2026
Japan · China	PMDA · NMPA	Planned

Korean registration supports partner-led registration in each market.

RECOGNITION

- MedTech Innovator APAC 2026 — Korea #1 of 680 companies
- TIPS Deep-Tech R&D program, Ministry of SMEs and Startups (2026)
- Global IP Star Company (2026)
- KOTRA IKSP selection (2026)

BACKED BY

KDB · KODIT · Kakao Healthcare · Ulsan-Hyundai Fund · Shinhan Gentium · Sunbo Angel Partners · KAI-KVIC · Mirae Science & Tech Holdings

Become a SinusView partner

Exclusive territories available for qualified distributors. Demo units and training provided.

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