

— FOR ANYONE WHO SELLS HEALTH PRODUCTS

The AI Health Scan that sells your products.

Your customers feel it. Now they can see it.

Our rPPG camera technology reads the pulse in your customer's skin, and AI turns it into 300+ biomarkers and a health score in about a minute. They watch the numbers improve, so they believe, they stay and they re-order. All under your brand.

RPPG CAMERA TECH

ON-DEVICE AI

YOUR BRAND

300+

BIOMARKERS

~60 sec

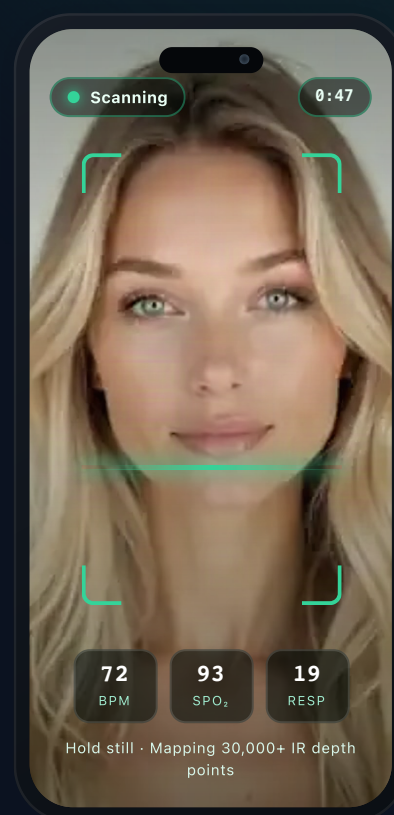
PER SCAN

0

HARDWARE TO BUY

100%

YOUR BRAND



THE OPPORTUNITY

Turn "trust me" into proof.

Everyone in health and wellness claims their product works. Supplements, peptides, essential oils, they all promise results a customer cannot see, so people doubt and move on. Our scanner changes that. rPPG camera technology plus AI reads real biomarkers from a 60-second face scan, so "I think I feel better" becomes a number that moved.

STEP 1 · RPPG

The front camera reads the blood-volume pulse from tiny color shifts in the skin. No wearable, no blood draw.

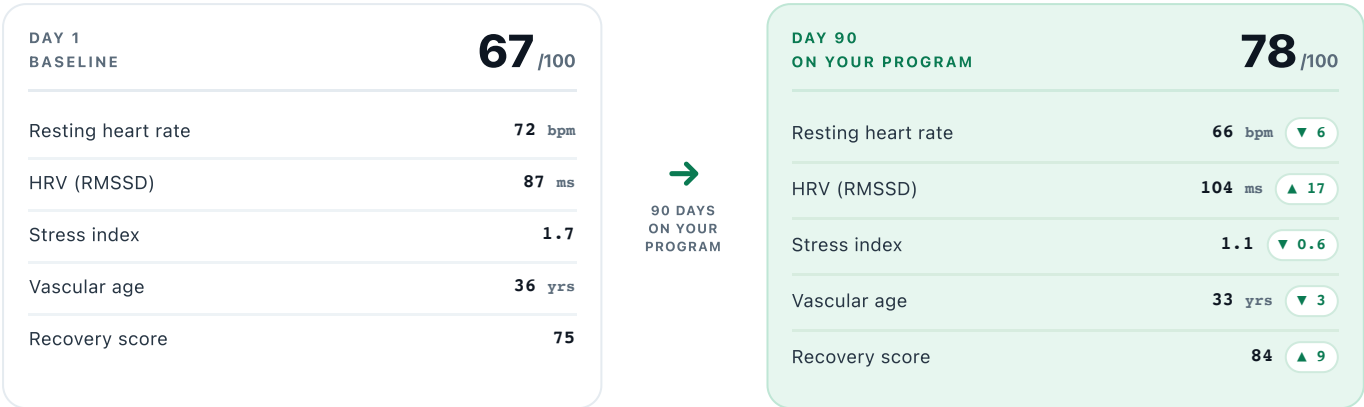
STEP 2 · AI

On-device AI turns that pulse signal into 300+ biomarkers and a health score in about a minute.

STEP 3 · YOUR BRAND

The whole scan runs inside your own app, on the phone your customer already owns.

AN ILLUSTRATIVE BEFORE AND AFTER



Illustrative example. The scanner measures wellness biomarker trends over time. It shows change, and it does not claim a specific medical outcome.

WHAT THAT DOES FOR YOUR BUSINESS

Proof that sells

Real numbers beat claims. Show a customer their scores moving, and the sale makes itself.

Retention that compounds

People stay to watch their scores improve, and they re-order to keep the progress going.

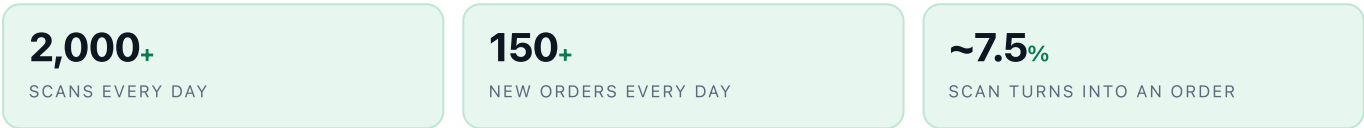
Testimonials with data

"My HRV went up 20 percent" beats "I feel great." Proof travels further than a promise.

Works across your channel

Sales teams, store staff, distributors and coaches all get a reason to start the conversation and prove value on the spot.

LIVE IN MARKET, RIGHT NOW



Live traction from the scanner in market today. Not a projection.

The pitch, in one line. Everyone in your space claims their product works. You will be the one who can show it, in numbers, under your own brand.

— HOW YOUR CUSTOMERS USE IT

Three steps. About a minute.

Your customer looks into their phone, and AI reads their vitals from the pulse in their skin. There is no hardware to buy and nothing to strap on. It works on a phone they already own.

- 1

Look into the camera
Hold the phone at arm's length. The front camera and ambient-light sensor lock onto the face and set exposure automatically. No attachments, no setup.
- 2

AI reads the pulse
Computer vision maps hundreds of facial landmarks while the rPPG engine detects the tiny color shifts in the skin as blood pulses through it, the same signal a hospital pulse sensor tracks.
- 3

Get the results
In about a minute, AI turns the signal into a health score plus 300+ biomarkers to track over time across heart, breathing, stress and more.

UNDER THE HOOD: FROM CAMERA TO BIOMARKER

01

Capture
The front camera records subtle color changes in the facial skin at high frame rate.

02

Track
Computer vision locks onto landmarks and isolates clean regions of skin.

03

Extract
Signal processing recovers the blood-volume pulse, the BVP waveform.

04

Measure
On-device AI reads the pulse to yield heart rate, HRV, respiration and more.

WHAT THE FACE SCAN READS

Heart rate

HRV

Respiration

Blood oxygen

Stress

Blood pressure

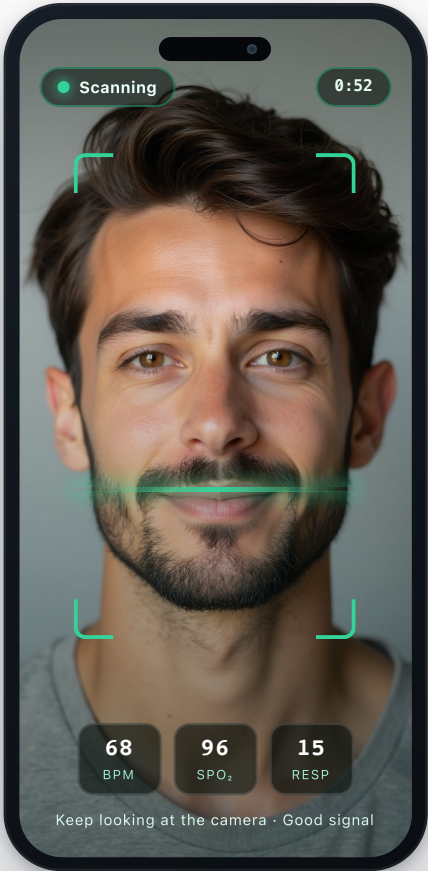
Recovery

Vascular age

VO₂max

Autonomic balance

and 100+ more

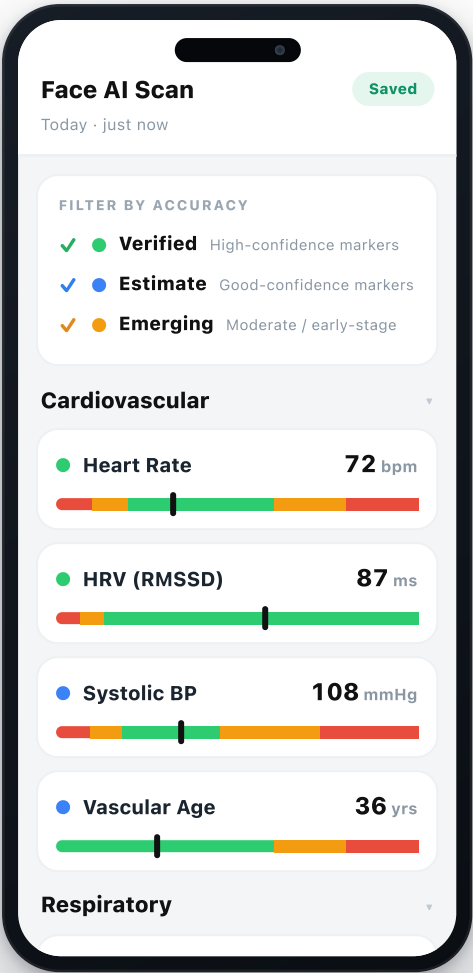


THE SCAN, IN PROGRESS

— WHAT COMES BACK

A clear report, in seconds.

Every scan returns the biomarkers grouped by body system, each with an accuracy label and a range bar that shows where the customer falls versus the healthy zone. Below is the real report, shown exactly as the mobile app renders it. The whole app is white-label, so it carries your brand and colors.



THE REAL REPORT

WHY THE REPORT EARNS TRUST

Every marker is labeled by accuracy

Each reading is tagged Verified, Estimate or Emerging. Nothing is presented as more certain than the science supports.

A range bar, not just a number

Red to green shows the healthy zone. The customer sees exactly where they fall, and where they can improve.

Trends over time

Scores update every scan. A drifting resting heart rate or falling HRV shows up before it is felt.

Recommended for you

AI matches each result to the right products, ready to add to cart in one tap.

Omega-3 Complex

Matched to your recovery

Add

Accuracy legend

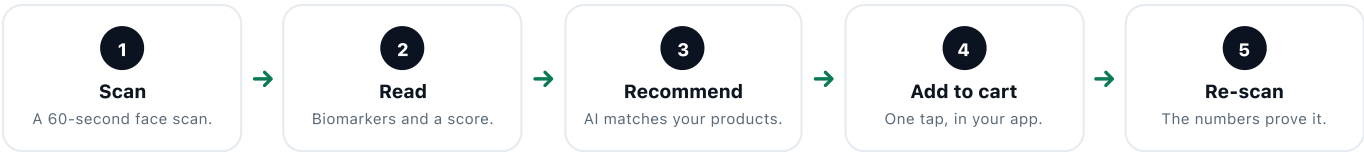
● Verified ● Estimate ● Emerging

— WHERE IT PAYS OFF

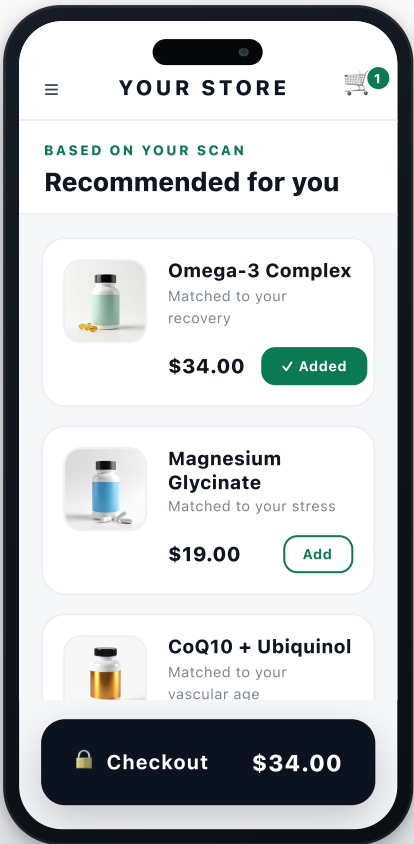
From scan to cart, in your own app.

The scan is not the end, it is the start of a purchase. AI reads the biomarkers, recommends the products that fit, and the customer adds them to the cart without leaving your app. Then they scan again and watch the numbers move. The whole loop runs on your brand, your catalog and your checkout.

THE LOOP



The loop repeats with every scan. Proof drives the next purchase, and the next purchase drives the next scan.



YOUR STORE, ON MOBILE

WHAT IT MEANS FOR YOU

Higher basket size

Every scan ends with a relevant product in the cart, not a dead end.

Recurring revenue

Re-scans show progress, which drives re-orders and subscriptions.

Your catalog, your checkout

Recommendations point to your products at your prices. The sale stays yours.

Two ways to launch

We build the whole branded app for you, or hand your team the SDK for iOS, Android and React Native. Either way, Plondo runs the engine.

For a pharmacy or major retailer. Add it to the app you already have: "Scan your face, see your biomarkers, and get the products we recommend to help." The recommendation and the checkout both happen in your app, and the basket is yours.

Illustrative screen. Products, prices and recommendations come from your own catalog. Wellness recommendations, not prescriptions.

WHAT IT MEASURES

300+ biomarkers, one look at the camera.

The face scan alone surfaces over 100 signals. Complementary scans, a connected health app and an exploratory Frequency AI layer push the full catalog to 345 individually labeled markers. Every marker carries an accuracy label, so your customers always see what is Verified and what is Emerging.

Browse every marker and its meaning at plondo.com/scanner/biomarkers.

FOUR PROGRESSIVE MODULES

Core rPPG scan

119 markers. Face and camera vitals validated against clinical references.

Expanded scan modes

34 markers. Fingertip, palm, voice, eye and motion scans that add depth on demand.

Frequency AI scan

72 markers. Bioenergetic frequency readouts. An emerging, exploratory layer.

Extended coverage

120 markers. Deeper frequency panels plus tongue, nail, breath and body scans.

EVERY MARKER IS LABELED BY EVIDENCE

● VERIFIED

● ESTIMATE

● EMERGING

Heart rate, HRV and respiratory rate are strongest. Blood oxygen is emerging. Blood pressure is experimental.

THE CORE MODULE, CATEGORY BY CATEGORY

CATEGORY	WHAT IT COVERS	MARKERS	EVIDENCE MIX
Heart & Pulse	Cardiac rhythm and circulation from the skin pulse	10	
Heart Rate Variability	Timing shifts that reveal recovery and adaptability	16	
Cardiovascular & Vascular	Vessel health and long-term heart-risk signals	18	
Stress & Nervous System	How activated or recovered the nervous system is	10	
Metabolic & Blood Chemistry	Metabolic estimates from the face and body	10	
Fitness & Recovery	Aerobic fitness and training-versus-rest readiness	8	
Aging & Longevity	How old the body reads physiologically	8	
Mental & Cognitive	Fatigue, focus and mood cues from face and voice	9	
Skin & Facial	Dermatology-style read on tone, texture and aging	12	
Behavioral & Fatigue	Blink, drowsiness and micro-sleep from the eyes	8	
Clinical Screening	Directional flags for when to see a professional	10	

Bars show the mix of Verified (green), Estimate (blue) and Emerging (amber) markers per category. The Expanded, Frequency and Extended modules add 226 further markers.

— WAYS TO SCAN

Start with the face. Go deeper when you want.

The face scan does the heavy lifting on its own. When more detail helps, complementary scans read the body in different ways, all from the same phone and its built-in sensors. Everything runs on hardware the customer already owns.

Face scan

● FLAGSHIP

Front camera, rPPG. Look into the front camera and read 100+ biomarkers from the pulse in the facial skin. No contact, about a minute.

Fingertip scan

Rear camera and flash, contact PPG. Rest a fingertip on the rear camera for a higher-precision pulse reading, plus a blood-oxygen estimate and an atrial-fibrillation check.

Palm scan

Rear camera. Reads the blood flow in the palm and analyzes the nail beds as another route to the vitals.

Eye scan

Front camera, pupillometry. Tracks subtle pupil and eyelid behavior for cues about fatigue, focus and cognitive load.

Voice scan

Microphone. Analyzes the acoustic qualities of the voice for directional signals about stress, mood and breathing.

Motion scan

Camera, motion amplification. Magnifies movement too small for the eye to see, surfacing signals like tremor and breathing patterns.

REACHING 300+: THE SCAN, PLUS EVERYTHING ALREADY TRACKED

The camera scans surface over 100 markers on their own. Connect Apple Health, Google Fit or any wearable, Apple Watch, Fitbit, Garmin, Oura, and continuous data streams in alongside every scan: sleep stages, continuous heart rate, blood pressure, glucose, weight, cycle tracking, ECG and activity. AI fuses it into one longitudinal picture and pushes the total past 300 biomarkers.

THE SCIENCE

Validated in the lab. Not just claimed in an ad.

rPPG measures the blood-volume pulse from the subtle color changes in the skin, the same principle behind the pulse sensor in a hospital. The method was discovered at a university laser lab, matured at MIT, and validated on hospital patients around the world.

33

PEER-REVIEWED STUDIES,
2008 TO 2026

≈1 bpm

HEART-RATE ERROR VS ECG

96%

RESPIRATORY-RATE
AGREEMENT, 963 PATIENTS

15+ yrs

OF PUBLISHED VALIDATION

BORN IN THE WORLD'S RESEARCH LABS

UC Irvine · Beckman Laser Institute

Discovered in 2008 that an ordinary camera can read the pulse in skin from across a room.

MIT Media Lab

Turned that discovery into webcam heart rate, breathing and HRV, validated against medical sensors.

University of Oxford

Proved camera vitals hold up on real patients in intensive care and neonatal wards.

Philips Research · TU Eindhoven

Built the motion-robust CHROM and POS algorithms that keep readings accurate under movement.

Microsoft Research

Pioneered the deep-learning models that push camera accuracy toward dedicated sensors.

Tsinghua · Oulu · USTB · HKUST

Drive today's transformer and state-space models that set new accuracy records every year.

The simple version. rPPG is not a gimmick. It is the same optical method used by the pulse sensor on a hospital finger clip or a smartwatch. "Remote" simply means it works from a distance, with no contact, just video of a face. It has been studied for over 15 years and cleared by the FDA inside commercial devices. Now combine that proven signal with the latest AI. The camera captures the pulse, and our AI reads over 300 biomarkers from it in about a minute, sharpening with every one of the millions of scans it learns from. Decades of validated optics, amplified by modern AI, running on the phone your customer already owns. That is what makes this different from anything else in wellness.

Read the full research and validation at plondo.com/scanner/science.

HOW CONFIDENT EACH READING IS

READING	WHAT THE RESEARCH SUPPORTS	STRENGTH
Heart rate	Within ~1 bpm of an ECG in peer-reviewed studies.	● VERIFIED
Heart rate variability	Recovered from 60-second video, correlated with reference PPG.	● VERIFIED
Respiratory rate	96% agreement with the clinical method in a 963-patient trial.	● VERIFIED
Stress & autonomic	Read from the pulse signal, up to 95.8% classification accuracy.	● VERIFIED
Blood oxygen (SpO ₂)	~2% mean error in study conditions, still maturing.	● EMERGING
Blood pressure	Promising, but not yet a clinical cuff. Shown as a trend only.	● EMERGING

THE EVIDENCE, IN THE OPEN

A selection of the strongest studies.

Grouped by signal and labeled by strength. Full citations are on the references page, and every source is public.

STUDY	SIGNAL	FINDING	STRENGTH
Poh, McDuff & Picard MIT Media Lab	HR, RR, HRV	A single webcam recovered heart rate, respiratory rate and HRV at once, agreeing with FDA-approved sensors above 0.98 correlation.	VERIFIED
Meta-analysis 2023 University of Leeds	Heart rate	Across 12 pooled studies, an overall bias of just 0.13 bpm between contact and contactless heart rate.	VERIFIED
Hospital trial 2022 963 patients	Respiratory rate	Camera respiratory rate showed 96.0% agreement with the standard clinical method.	VERIFIED
Oxford ICU 2022 John Radcliffe / Oxford	HR & RR	In adult ICU patients, camera heart rate matched wired monitors within 2.5 bpm ($r \approx 0.98$).	VERIFIED
NYCU AFib 2022 453 patients	Atrial fibrillation	Facial video screened for AFib with 90% accuracy on 30-second clips, 97% on longer recordings.	VERIFIED
PanopticAI 2026 Prince of Wales / CUHK	Heart rate	Across 782 measurements, camera pulse matched ECG within 1.06 bpm ($r = 0.962$). Software is FDA-cleared, K240890.	VERIFIED
Milano 2025 562 participants	Blood oxygen	Camera SpO2 reached 2.10% mean error. Blood pressure was much weaker, which we label honestly.	EMERGING

REGULATORY RECOGNITION

Cleared by the FDA, in real products.

Regulators have cleared commercial rPPG devices for pulse rate and respiratory rate. These clearances belong to the underlying technology in other companies' devices.

FaceHeart	K243966	Video respiratory rate
Presage	K254169	Pulse + breathing rate
PanopticAI	K240890	Camera pulse rate

HONEST ABOUT THE LIMITS

What it does not do.

A wellness tool, not a diagnosis. It tracks trends and does not replace medical care.

Accuracy varies by marker. Strongest for HR, HRV and respiratory rate. SpO2 is emerging, blood pressure experimental.

Conditions matter. Bright, even light and staying still give the best readings.

— WHY THE BEST BRANDS WANT IT

Your brand. Your data. Your proof.

A scan is more than engagement, it is proof. Baseline your customers, then show them the change over time, all under your name. That is what turns a product claim into a reason to buy again, and again.

Proof of results

Before and after scans turn your product claims into numbers a customer can see. Proof closes the sale and earns the re-order.

Matched recommendations

AI maps each result to a next step, a product or a routine tuned to what the numbers show. This is where your products attach.

Zero hardware, fast launch

No devices to ship or support. If a customer has a phone, they already have everything they need.

Your brand, your data

The scanner lives inside your product under your name, with readings staying in your ecosystem.

WHERE IT FITS

YOUR BUSINESS	THE FIT
Supplement & nutraceutical brands	Baseline, then re-scan to show the change. The scan sells the next bottle, and the results keep customers subscribed.
Pharmacy & retail health	Turn a store or app into a health destination. A scan draws shoppers in and points them to the right products on your shelves.
Peptide & performance brands	Recovery, HRV and vascular markers put hard numbers behind a performance claim.
Essential oils & aromatherapy	Stress, HRV and relaxation markers show a calming routine working, in real time.
Direct selling & MLM	A branded scanner gives every distributor a reason to reach out, follow up and prove value on the spot.
Functional medicine & longevity	Vascular age, HRV and recovery track a protocol over months, alongside your services.
Gyms & coaching	Recovery and training readiness give members a daily reason to check in and to upgrade.

How it integrates, your choice. We build and run the entire branded app for you, or we hand your team the SDK for iOS, Android and React Native, with a hosted API and admin console, to embed in the app you already have. Either way, Plondo handles the engine, and you bring the brand and the customers.

See your vertical live in a 20-minute walkthrough. [Schedule a call →](#)

— GOOD TO KNOW

The questions everyone asks.

How accurate is a face scan, really?

For heart rate, respiratory rate and HRV, camera rPPG has been validated against clinical references. Heart rate lands within roughly 1 bpm of an ECG in peer-reviewed studies, and respiratory rate reached 96% agreement in a 963-patient hospital trial. Other markers are shown as Estimate or Emerging, and every reading carries an accuracy level.

What does someone need to take a scan?

Just a phone and reasonable lighting. Hold it at arm's length so the face is in frame, stay still for about a minute, and the app does the rest. No wearable, cuff or finger clip required.

Is this a medical device or a diagnosis?

No. The scanner is a wellness tool for tracking trends over time. It does not diagnose, treat, cure or prevent any disease, and it is not a substitute for professional medical care.

Does it work across skin tones?

rPPG research increasingly spans diverse skin tones and lighting, and validation studies have included varied populations. Accuracy can vary with lighting and movement, and modern deep-learning models have narrowed the gap that older methods showed. We are transparent about this.

How does it run under our brand?

The scanner ships as an SDK for iOS, Android and React Native with a hosted analysis API. It lives inside your own app, clinic workflow or membership, with your name, colors and data. Plondo handles the underlying technology.

How private is the data?

A scan turns into numbers on the device. The user chooses what to keep and what to share, and readings stay inside your ecosystem.

How many people actually finish a scan?

Completion is high because the scan is fast and needs no setup. In market today the scanner runs over 2,000 scans a day, and roughly 150 of them turn into orders the same day.

Can customers compare scans over time?

Yes. Every scan saves to the customer's profile, so they see trends and watch scores improve. That progress is what brings them back and drives the next order.

THE DISCLAIMER, IN FULL

The Plondo rPPG Scanner is not itself FDA-cleared. References to FDA clearance describe the underlying rPPG technology as cleared in other companies' commercial devices. It is a wellness tool for tracking trends, not a medical device, and does not diagnose, treat, cure, or prevent any disease.

— REFERENCES

The research behind the numbers.

Every study cited in this document. Full sources also live at plondo.com/scanner/science.

Verkruysse, Svaasand & Nelson (2008). Remote plethysmographic imaging using ambient light. *Optics Express* 16(26). Beckman Laser Institute, UC Irvine.

Poh, McDuff & Picard (2010). Non-contact, automated cardiac pulse measurements using video imaging and blind source separation. *Optics Express* 18(10). MIT Media Lab.

Poh, McDuff & Picard (2011). Advancements in noncontact, multiparameter physiological measurements using a webcam. *IEEE Trans. Biomedical Engineering* 58(1).

de Haan & Jeanne (2013). Robust pulse rate from chrominance-based rPPG. *IEEE TBME* 60(10). Philips Research & TU Eindhoven.

Wang, den Brinker, Stuijk & de Haan (2017). Algorithmic principles of remote PPG. *IEEE TBME* 64(7).

Chen & McDuff (2018). DeepPhys: video-based physiological measurement. *ECCV* 2018. Microsoft Research & MIT.

Yu et al. (2022). PhysFormer: facial video physiological measurement with temporal difference transformer. *CVPR 2022*. Tsinghua & Oxford.

Sun & Li (2024). Contrast-Phys+: unsupervised remote physiological measurement. *IEEE TPAMI*. University of Oulu.

Zou, Guo, Hu & Ma (2024). RhythmMamba: fast, lightweight, accurate remote physiological measurement. *arXiv*. USTB.

Villarroel, Jorge, Tarassenko et al. (2019). Non-contact monitoring of preterm infants in the NICU. *npj Digital Medicine* 2:128. Oxford.

Jorge, Villarroel, Tarassenko et al. (2022). Non-contact monitoring of post-operative ICU patients. *npj Digital Medicine* 5:4. Oxford.

Sun, Yang, Wu et al. (2022). Contactless facial video with deep learning for AFib detection. *Scientific Reports* 12:281. NYCU.

Frontiers in Physiology (2022). rPPG accurately measures respiratory rate. 963-patient hospital trial.

Chin, Chan et al. (2026). Clinical validation of rPPG pulse-rate monitoring in CVD patients. *Bioengineering (MDPI)*. Panoptical & CUHK. FDA K240890.

Khan et al. (2026). Rapid non-contact HR and RR from face videos. *Sensors (MDPI)*. Gothenburg & Detectivio.

Estevez et al. (2025). Continuous non-contact vital signs of neonates using RGB-D cameras. *Scientific Reports*. Cambridge & Rosie Hospital NHS.

Woelk et al. (2026). Advancing rPPG for cardiac monitoring via webcam. *Behavior Research Methods*. UCL.

Garvin et al. (2024). Contactless vital signs in video telehealth visits. *JMIR Formative Research*. VA Boston.

Zuccotti et al. (2025). Accuracy of HR, SpO2 and BP using a non-contact PPG app. *Digital Health (SAGE)*. Milano & Buzzi Hospital.

Bioengineering (2024). Contactless SpO2 from facial videos using deep learning. 11(3):251.

Srestha et al. (2026). Hybrid CNN-spectral architecture for non-contact respiratory rate. *PLoS One*. Yeungnam University.

Fontes et al. (2024). Enhancing stress detection through rPPG and deep learning. *Sensors*. Nottingham Trent.

Kapoor, Holman & Cohen (2024). Contactless BP and pulse-rate monitor for hypertension screening. *JMIR Cardio*. Lifelight.

Park & Hong (2024). Robust blood pressure from facial videos in diverse environments. *Heliyon*. Sungkyunkwan University.

Bautista et al. (2023). Clinical applications of contactless PPG in adults, meta-analysis. *J. Clinical and Translational Science*. Leeds.

npj Digital Medicine (2023). Challenges and prospects of visual contactless physiological monitoring. 6:231.

Bondarenko, Menon & Elgendi (2025). Demographic bias in public rPPG datasets. *npj Digital Medicine*. ETH Zurich.

Acharya et al. (2025). Reliability of rPPG under low illumination and high heart rates. *npj Digital Medicine* 8:744. Bielefeld.

— GLOBAL BY DEFAULT

Available in 61 languages and dialects.

The scanner is not English with a few translations bolted on. The entire experience ships in 61 languages and dialects, right out of the box: the scan screen, every one of the 300+ biomarker names and explanations, the accuracy labels, the product recommendations and the checkout. Your customer scans, reads the report and buys, all in their own language, all under your brand.

ONE APP, SPOKEN THE WORLD OVER

English

Español

Deutsch

Français

Português

Italiano

Nederlands

Polski

Русский

Українська

Türkçe

العربية

עברית

فارسی

اردو

हिन्दी

বাংলা

தமிழ்

తెలుగు

ಕನ್ನಡ

മലയാളം

मराठी

ગુજરાતી

ਪੰਜਾਬੀ

日本語

한국어

简体中文

繁體中文

粵語

ไทย

Tiếng Việt

Bahasa Indonesia

Bahasa Melayu

Filipino

ፊንታይኒያ

Ελληνικά

Čeština

Magyar

Română

Svenska

Norsk Bokmål

Dansk

Suomi

Íslenska

Hrvatski

Slovenčina

Slovenščina

Български

Srpski

Shqip

Eesti

Latviešu

Lietuvių

Malti

Lëtzebuergesch

Kiswahili

Afrikaans

isiZulu

አማርኛ

O'zbek

Беларуская

Localized end to end

Scan flow, biomarker report, accuracy labels, recommendations and checkout are all translated. Nothing falls back to English mid-scan.

Right-to-left ready

Arabic, Hebrew, Farsi and Urdu render right-to-left, with the layout mirrored so the app feels native, not converted.

One brand, every market

Launch in one country or forty. The same white-label app carries your name into every language your customers speak.

Sell where your customers are. A scan that speaks the customer's language builds trust the moment it opens. That is how a global brand turns one product into proof in 61 markets at once.

— THE SCAN IS THE PITCH

Book a live demo. We'll scan your team.

In 20 minutes we scan your team, then show the biomarker report, the product recommendations and the add-to-cart flow, all under your brand. Then we build it for you, or hand your team the SDK.

01

Book the demo

Twenty minutes. We scan your team live and walk the full loop.

02

See the results

The report, the product recommendations and the add-to-cart flow.

03

Launch it

We build the whole app for you, or hand your team the SDK.

Pick a time that works for you.

[Schedule your live demo →](#)

Email support@plondo.com

Web plondo.com/scanner

DOWNLOAD THIS OVERVIEW IN YOUR LANGUAGE

English

Español

Deutsch

Français

简体中文

العربية

Português

עברית

한국어

Bahasa Melayu