A5-AI Intelligent Imager

LEAD TECHNOLOGY CREATE BEAUTY

A5 AI
Intelligent skin tester

A5 AI Intelligent skin tester: With a research and development focus on solving skin problems, it integrates eight spectral imaging technologies and can professionally and objectively analyze seventeen problems of facial skin with flexible operations. The original intention of the research and development is to take photos and analyze reports with just one click, making it more convenient to operate.

Supports 19 languages


Traditional Chinese


English


French


German


Japanese


Korean


Spanish


Portuguese


Italian


Russian


Dansk


Dutch


Polish


Turkish

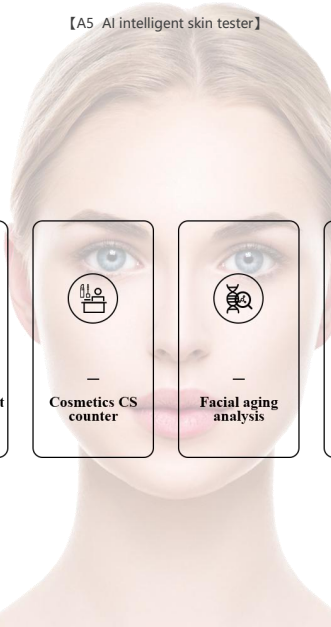

Arabic


Tiếng Việt


Indonesian


Thai

Adapt to the scene



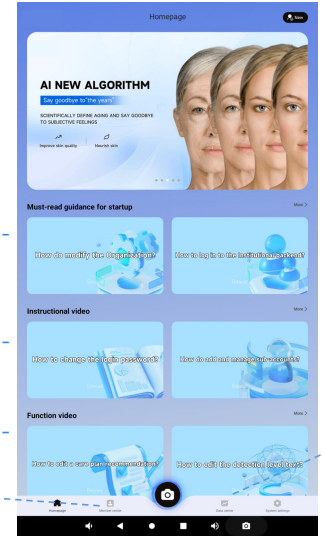
- Medical beauty agency
- Skin Management Center
- Cosmetics CS counter
- Facial aging analysis
- Verification of anti-aging product effects
- Support scientific research experiments

Catalogue

01

FUNCTION DEMO

A5 AI INTELLIGENT SKIN TESTER



Must-read guidance for startup

Instructional video

Function video

Member Center

Banner

Data Center

Click on the setting to adjust the parametersters

Analysis of **4** major symptoms

30+ detection dimensions

Analysis of aging


Forehead lines


Dorsal nasal lines


Lines around the eyes


Crow's feet


Nasolabial folds

Sensitive analysis


Acne


Redness


Acne rosacea


Barrier

Pigment analysis


Mole


Freckles


Acne marks


Spots

Skin quality analysis


Pores


Porphyrin


Wrinkle


Moisture

Function demo

THREE DIMENSIONAL SHOOTING

EIGHT SPECTRAL IMAGING

TWO SKIN TYPE PREDICTION MODES

CLOUD DATA STORAGE

SEVENTEEN TESTING INDICATORS

CUSTOMER FILE MANAGEMENT

A5 AI intelligent skin tester

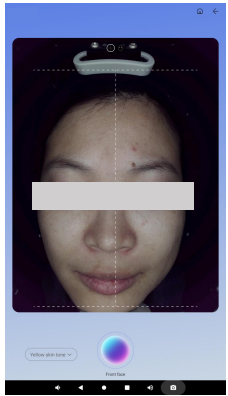
THREE COMPARATIVE ANALYSIS MODES

ADJUSTING SKIN TEST RESULTS

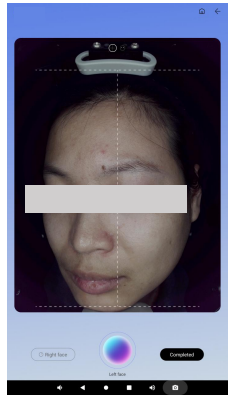
THREE REPORTING MODES

BACKEND SYSTEM MANAGEMENT

Three dimensional shooting



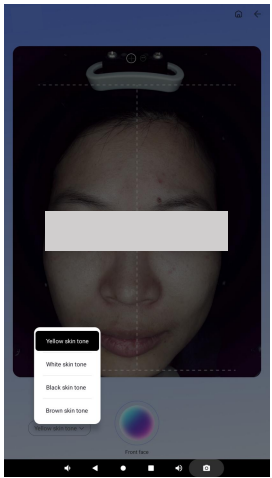
Front face



Left face

Right face

Four skin tones available



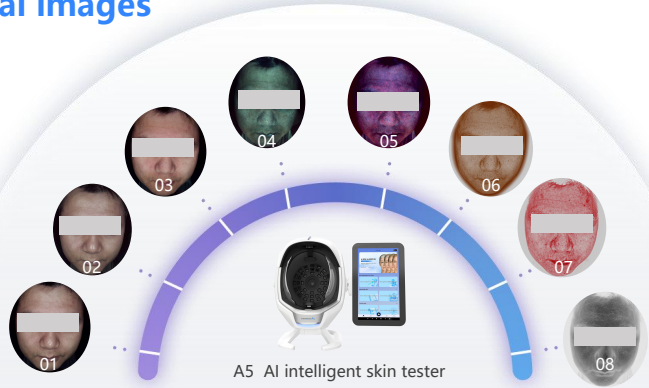
Yellow Skin

White skin

Dark skin

Brown skin

• Eight spectral images



01	02	03	04	05	06	07	08
White light	Positive polarized light	Negative polarized light	Wood’ s light	UV light	Brown light	Red light	Mixed light

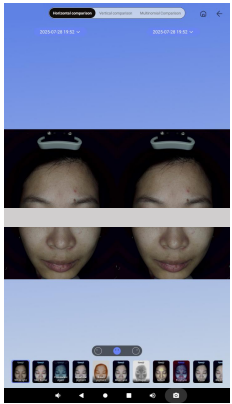
Seventeen testing indicators

- Hydration
- Pores
- Blackhead
- Sebum
- Skin Barrier
- Acne
- Wrinkle
- Mixed spot
- Superficial pigment

A5 AI intelligent skin tester

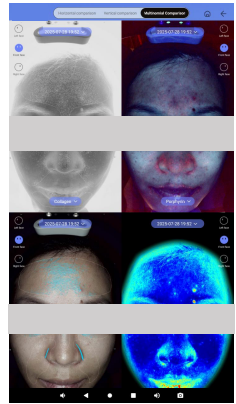
- Porphyrin
- Collagen
- Fluorescent agent
- Deep pigment
- Brown pigment
- Heat Map of Sensitivity
- Heat Map of Pigment
- Red Map of Sensitivity

Three comparison modes



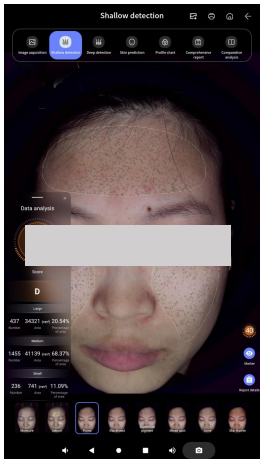
Horizontal comparison

Vertical comparison



Multinomial contrast

Single independent reporting



Introduction to data analysis

1.Score
2.Level
3.Number
4.Area
5.Percentage of area

Let consumers accurately understand their skin problems

Accurately quantify the underlying effect and empower doctors to treat

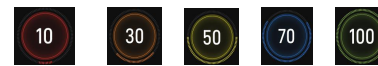
Data score

It is divided into 5 levels according to the skin condition from high to low and marked with different colours.

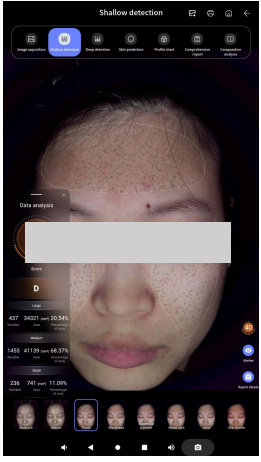
A Green B Blue C Yellow D Orange E Red

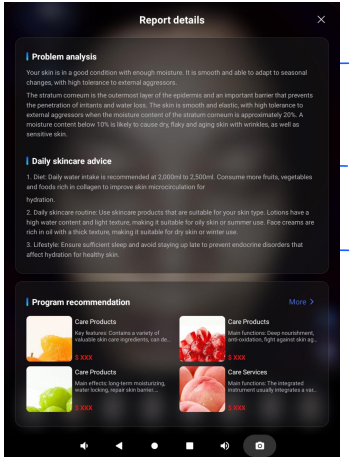
Multidimensional perspective

Multi-angle comprehensive image display



Three reporting modes-Single independent report

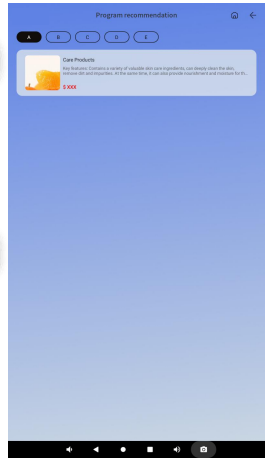




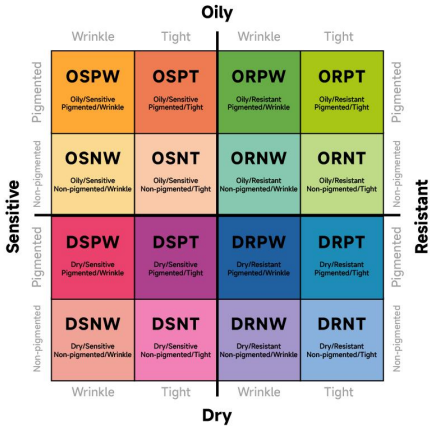
Problem analysis

Nursing advice

Scheme recommendation



The classification of 16 skin types in Baumann Skin Typing System



16Type	Explanation	16Type	Explanation
DSPT	Dry, Sensitive, Pigmented, Tight	OSPT	Oily, Sensitive, Pigmented, Tight
DSPW	Dry, Sensitive, Pigmented, Wrinkle	OSPW	Oily, Sensitive, Pigmented, Wrinkle
DSNT	Dry, Sensitive, Non - Pigmented, Tight	OSNT	Oily, Sensitive, Non - Pigmented, Tight
DSNW	Dry, Sensitive, Non - Pigmented, Wrinkle	OSNW	Oily, Sensitive, Non - Pigmented, Wrinkle
DRPT	Dry, Resistant, Pigmented, Tight	ORPT	Oily, Resistant, Pigmented, Tight
DRPW	Dry, Resistant, Pigmented, Wrinkle	ORPW	Oily, Resistant, Pigmented, Wrinkle
DRNT	Dry, Resistant, Non - Pigmented, Tight	ORNT	Oily, Resistant, Non - Pigmented, Tight
DRNW	Dry, Resistant, Non - Pigmented, Wrinkle	ORNW	Oily, Resistant, Non - Pigmented, Wrinkle

Three reporting modes-Comprehensive analysis report

Personal Information

16-type skin classification and comprehensive score

On the left is the skin water content and on the right is a single report.

Single indicators below C will be realised in the form of radar charts.

Comparative analysis, only compare and analyse with the results of the last shooting.

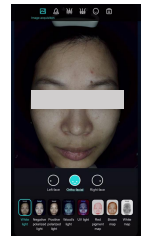
Shallow test

Deep test

Three reporting modes-Comprehensive analysis report

Overall recommendation

Real-time analysis of problems and nursing suggestions based on Bauman's 16 types of skin classification

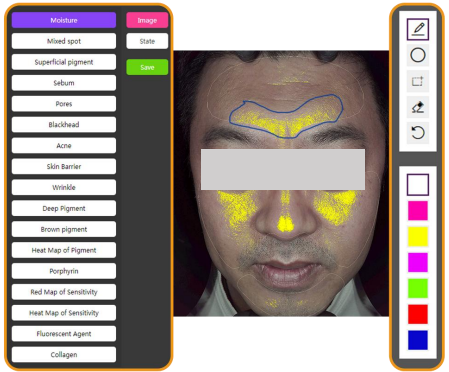


H5 Mobile phone report

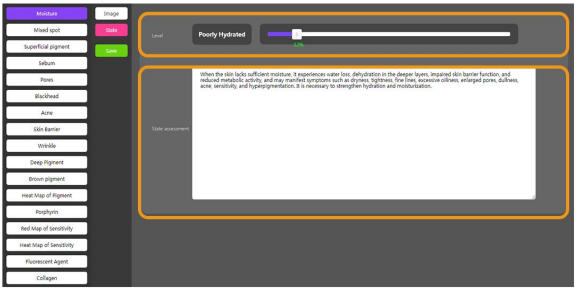
Download the report

Scan the code on your mobile phone to get the report

Three kinds of reporting modes



Innovation Independent Editing Report 3



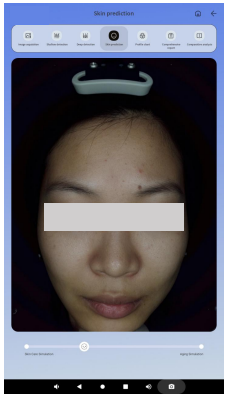
The background automatically selects the image to be edited for annotation

Customize any test results you want

You can debug results for each indicator

Free copy editing

Skin prediction



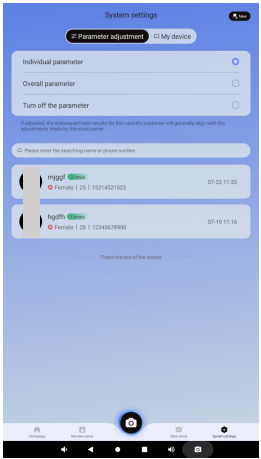
Nursing simulation

Deeply predict the future of the skin and awaken customers' desire for young skin.

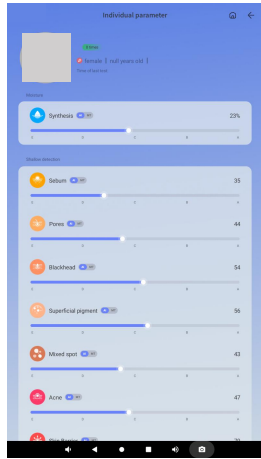
According to the current skin condition of the customer, through the training of AI large model, simulate the skin condition after customer care and the aging situation of different age groups.

Aging simulation

Parameter adjustment



Parameter adjustment

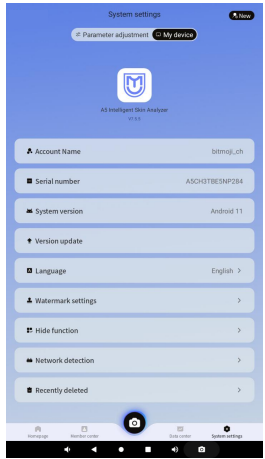


Data result optimization manual debugging

It can be adjusted as a whole

My device

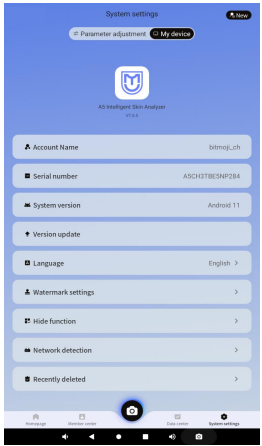
The language can be adjusted

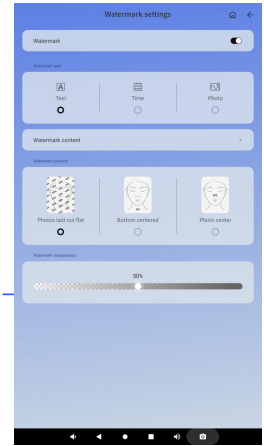


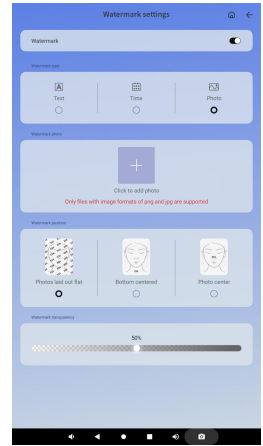
Serial number

You can find the instrument problem through the background and solve it.

Watermark function

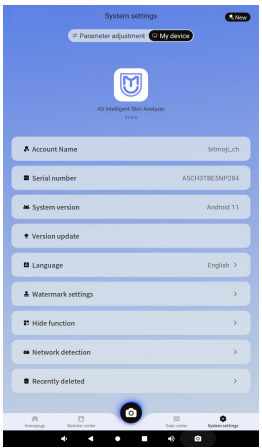


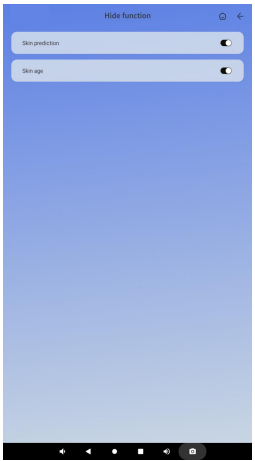




Customizable text watermark, image watermark

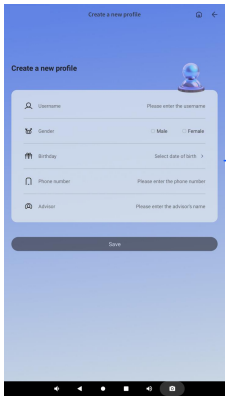
Hide function

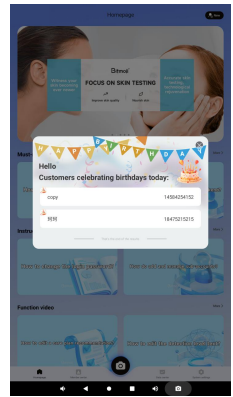




The function of skin prediction and skin age can be turned off or on at your own discretion.

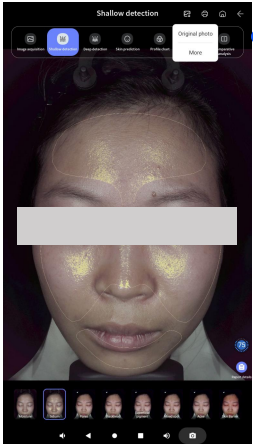
Birthday reminder function



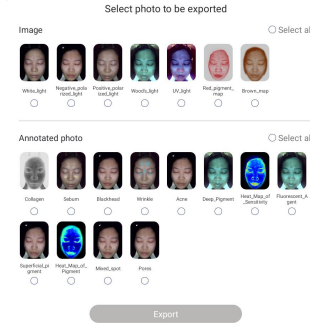


Automatically send out the list of customers whose birthdays are on that day, in order to enhance customer retention.

Image export function



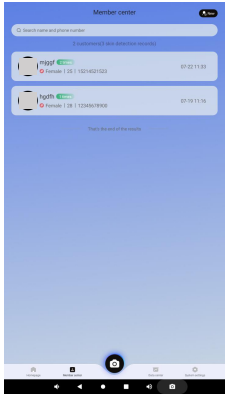
Exporting images



This figure is exported.

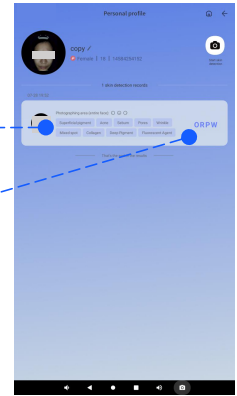
Export multiple images

Member Center



The test items with scores below 60 will be listed here.

Bauman 16-type classification



Cloud storage

One click search

Number of skin tests

File Management

Profile

Data Center

Choose the year and the month

The number of people entering the store in a month or a year can be displayed more intuitively through the line chart

Ratio of men to women

He men and women who enter the store can see the ratio of male and female women who enter the store through the data form more clearly and intuitively

Problem proportion

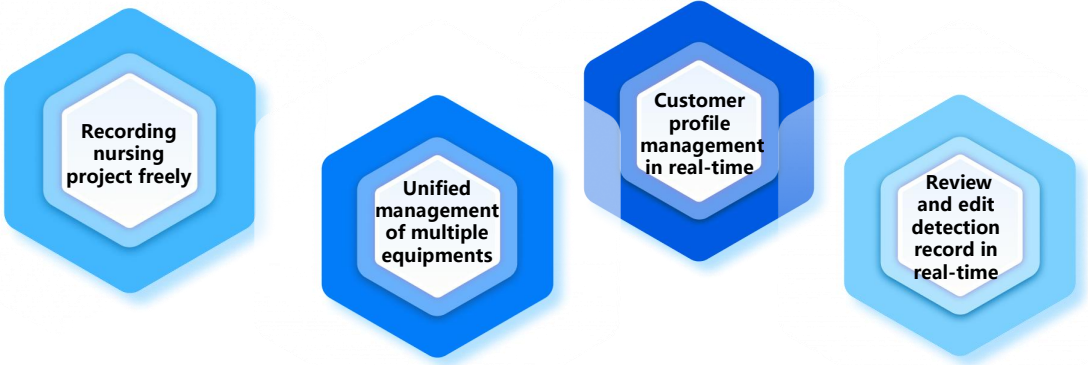
In the form of data, the current population is divided into five levels with different colors to represent the data in each indicator

Available year

Age distribution

Through the age division of the number of people entering the store in the form of data.

Backend management



02

PARAMETERS

A5 AI INTELLIGENT SKIN TESTER

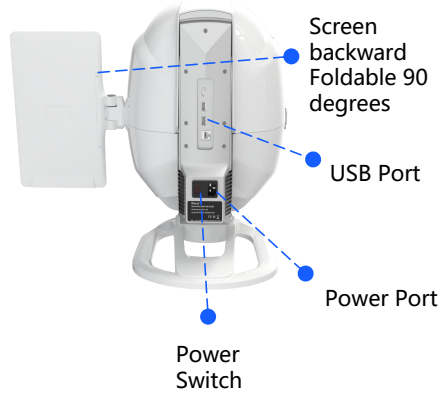
Parameters

Device Name	A5-AI intelligent skin tester
Model	ZMLH-A5
Pixel	36 million (Industrial-grade)
Spectrum	White light, Positive polarized light, Negative polarized light, Wood's light, UV light, Red pigment map, Brown map, and White map
Light shielding mode	mode: semi-open
Materials	ABS (Industrial grade)
Power supply	AC 100-260V, 50/60Hz
Dimension	433x637x520mm (folded: 433 × 424x520mm)
Central processing unit	Rockchip RK3568, quad-core Cortex-A55, with a maximum clock speed of 2.0GHz
Motherboard	R10-S6810, equipped with Android 11 system
Memory	Dual-channel LP DD R4, 4G
Hard drive	MMC 5.1, 32G

Parameters

Device Name	A5-AI intelligent skin tester
Hard drive	MMC 5.1, 32G
Operation	Capacitive multi-touch touchscreen
Screen feature	90-degree foldable
WIFI	Built-in dual-band WIFI (2.4G, 5GB)
HDMI	1 Pcs
USB	2 Pcs
Screen ratio	16:9
Screen size	15.6 inch
Screen pixels	1920*1080
Device net weight	11.5 KG
Packing weight	17.8 KG
Packaging box size	600 x 580 x 640mm
Packaging material	corrugated paper + EPE
Other accessories	power cord

Hardware parameters



A5 AI INTELLIGENT IMAGER

03

EIGHT SPECTRAL IMAGE ANALYSIS

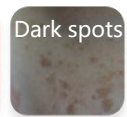
A5 AI INTELLIGENT SKIN TESTER

Eight spectral image analysis

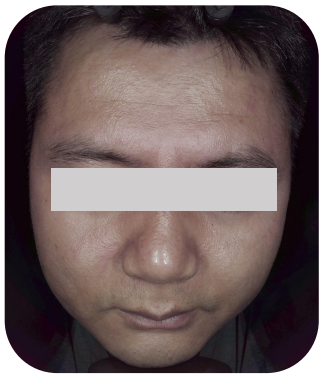
White light

THEORY

Visible spots and other blemishes on the skin surface (acne,spots,wrinkles, pores, etc.) under natural light sources, which are mainly used as the basis for other spectral image comparison.



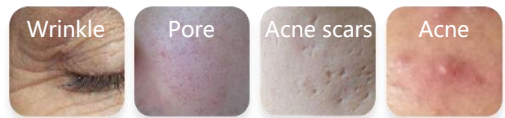
Eight spectral image analysis



Positive polarized light

THEORY

Positive polarized light can improve the clarity of superfacial texture, magnify local details, so as to clearly observe the smoothness of skin, fine lines and wrinkles and bumps (wrinkles, pores,Acne scars, Acne, etc).

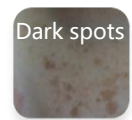


Eight spectral image analysis

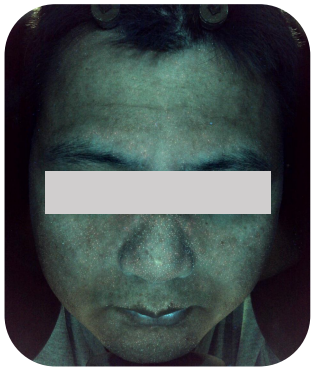
Negative polarized light

THEORY

Using negative polarized technology to filter out the refracted light on the skin surface, so that you can clearly examine the light brown, tan, dark brown, light yellow or dark red skin lesions; It can distinguish the condition of capillaries, facial acne, uniformity skin and other skin problems.



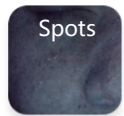
Eight spectral image analysis

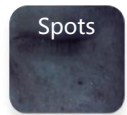


Wood’ s light

THEORY

Wood’ s light can detect deep pigments in dermis. The principle behind this is that melanin does not fluoresce after exposure to ultraviolet radiation, allowing melanin to stand out more clearly with stronger contrast.





Eight spectral image analysis

UV light

THEORY

Under UV light source, the content and distribution of the purple pigment bilirubin are displayed clearly through fluorescence, which can be used for the auxiliary diagnosis and efficacy observation of pigmentary dermatoses, pore issues, skin infections, and porphyria.

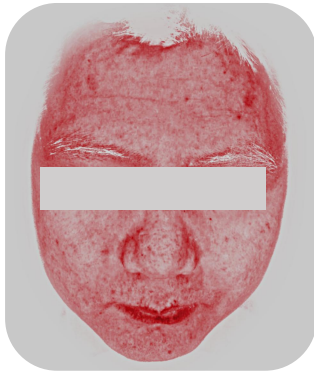
Eight spectral image analysis

Brown light

THEORY

The position, area, shape, and severity of subcutaneous facial UV spots are processed by using RBX light source technology, which demonstrate skin damage from UV radiation and the accumulation of subcutaneous melanin.

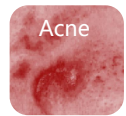
Eight spectral image analysis



Red light

THEORY

Used to analyze subcutaneous hemoglobin and inflammatory pigment deposition on the face, such as sensitivity, skin lesions, acne, erythema, etc.



Eight spectral image analysis

Mixed light

THEORY

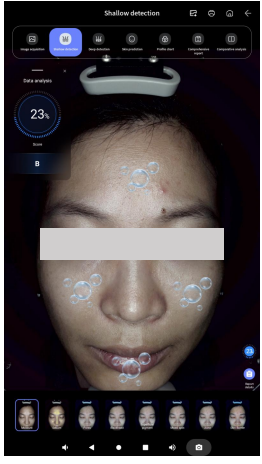
Skin texture roughness and collagen loss were revealed by polarizing analysis.

04

21
DETECTION
FUNCTION

A5 AI INTELLIGENT SKIN TESTER

21 Detection function-Moisture Test Report 1

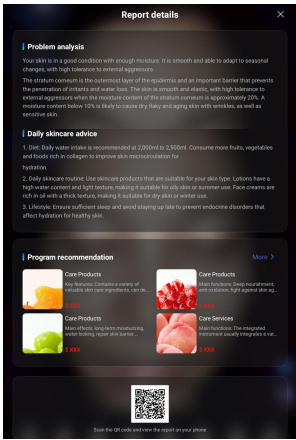


Skin water content score

The water content of the skin is sorted from high to low according to five levels and marked with color.

E D C B A

21 Detection function-Moisture Test Report 2

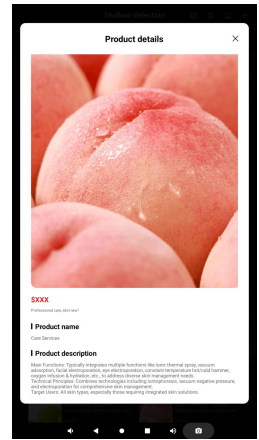


Problem analysis

Nursing advice

Scheme recommendation

Scan the code to view the report



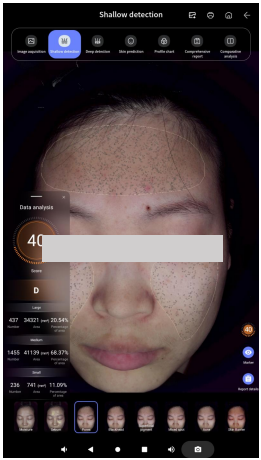
21 Detection function

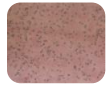
Sebum

Image Analysis

- The oil secretion of the skin surface can be checked under positive polarized light source.
- The algorithm displays areas of the skin with active oil secretion through yellow ,through the form of data, you can see the oiliness of facial skin more clearly and intuitively.
- Excess oil is one of the factors that trigger acne growth, so please take good oil control care if you have acne.

21 Detection function



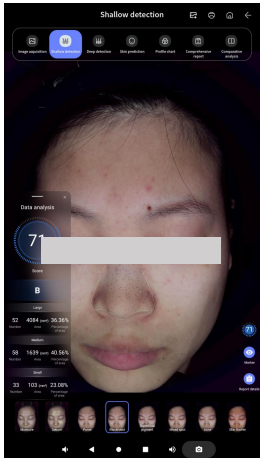


Pores

Image Analysis

- Under negative polarized light source, it is possible to check if enlarged pores have formed on the skin surface.
- The algorithm uses the RBX technology to process and present the areas with large pores in the skin as dark gray small circles; it can also show the situation of already enlarged pores in the facial skin in a clearer and more intuitive data form.
- Pore clogging refers to the pores on the surface of the skin being blocked, which prevents sebum from being discharged normally, accompanied by the accumulation of stratum corneum and dirt. this phenomenon usually manifests itself in the form of blackheads, whiteheads or acne, and in severe cases may lead to skin problems such as acne and folliculitis.

21 Detection function

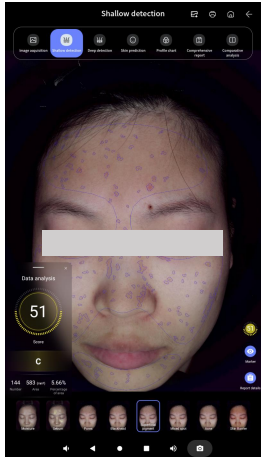


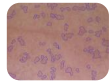
Blackhead

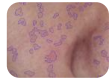
Image Analysis

- Under negative polarized light source, you can see blackheads formed by pores clogged by oil in the T-zone.
- The algorithm uses the RBX technology to process and present the area of blackheads in the T-zone as small dark gray circles; it enables a clearer and more intuitive view of the blackheads on the nose area through the data.
- Blackheads are formed by excess oil accumulation in the nose area of the skin and air oxidation. Areas with large pores are more likely to accumulate and store oil and dust in the air, so it is necessary to clean and moisturize in time to reduce the formation of large pores.

21 Detection function





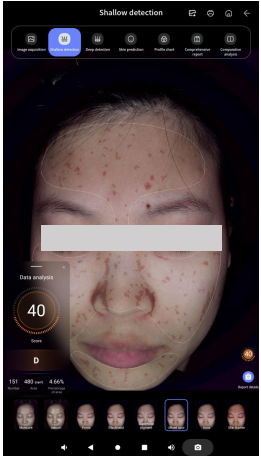


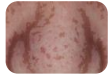
Superficial Pigment

Image Analysis

- Superficial pigment refers to pigmentation that has formed on the superficial layer of the skin, including: acne scars, spots, inflammatory pigmentation, etc.
- The coverage of pigmentation may exist in both deep and shallow layers. you can compare the image with the deep pigment image. If the shallow layer shows pigmentation but the deep layer shows no pigmentation, it means that the pigment is only deposited in the superficial layer of the skin.
- The algorithm marks the pigmented area with a purple polygon curve, and the shallow pigment can be seen more clearly and intuitively through the form of data.

21 Detection function



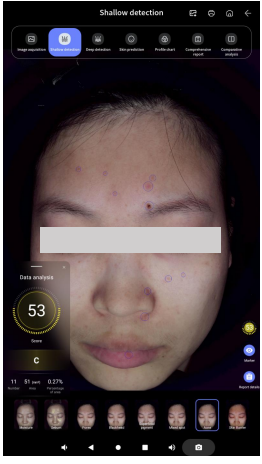


Mixed Spot

Image Analysis

- Under negative polarized light, we can see the distribution of mixed spots on the skin surface. The algorithm identifies the facial complex spot area and marks it with a brown block.
- The mixed spot map shows skin pigmentation such as melasma, age spots, and freckles. Melasma is a darker patch on the skin that can appear brown, black, or dark brown. Melasma may expand over time, especially if daily sun protection and skin care are not taken care of. Some melasma may be slightly raised and feel slightly convex to the touch.
- The algorithm marks the mixed spot area with brown color blocks, and the mixed spot situation can be seen more clearly and intuitively through the form of data.

21 Detection function

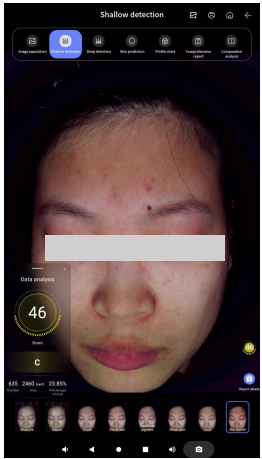


Acne

Image Analysis

- Look at the distribution of skin acne and superficial redness under negative polarized light.
- When pores are clogged with oil and dust, it is easy to fester or form inflammation, which will then turn into acne and acne.
- The algorithm identifies the distribution area of facial acne and marks it with blue circles. The more the number and the more obvious the redness of the skin, the more serious the skin acne problem is, and the skin needs to be oil-controlled to unclog the pores and eliminate inflammation.You can see the acne situation more clearly and intuitively through the form of data.

21 Detection function

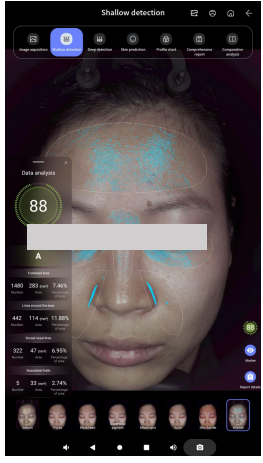


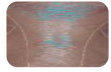
Skin Barrier

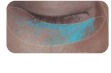
Image Analysis

- We can check the skin barrier health under negative polarized light source.
- The barrier image shows the skin redness problem and the distribution of red blood streaks. The formation of red blood streaks is mainly due to the damage of keratin, the weakness of the epidermis, and the long-term damage of the capillary position, which leads to vascular dilation and congestion.
- The redder the area, the more severe the damage to the skin barrier. This can be used as a reference for judging the sensitivity of the skin and the presence of inflammatory areas. The damaged condition of the barrier can be seen more clearly and intuitively in the form of data.

21 Detection function





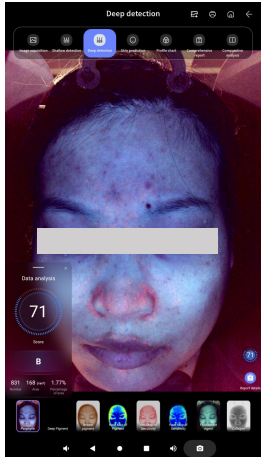


Wrinkle

Image Analysis

- The texture of the skin surface can be viewed under a positive polarized light source.
- The wrinkle image shows the roughness of the skin texture, such as large pores, dry lines, fine lines, and wrinkles. It can be used as a reference for judging the fineness of the skin and the loss of collagen.
- The algorithm identifies the patterns on the facial skin and marks the distribution of skin wrinkles in five areas (forehead wrinkles, nasal bridge wrinkles, eye area wrinkles, crow's feet wrinkles, and laugh lines) with Lake blue dotted lines. The more discontinuous the lines, the rougher the skin. This way, the wrinkles can be seen more clearly and intuitively in a data form.

21 Detection function

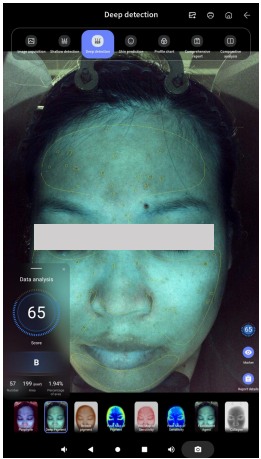


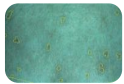
Porphyrin

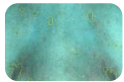
Image Analysis

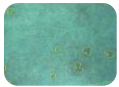
- The brick-red fluorescent spots in the picture are propionibacterium acnes and malassezia. these two bacteria will aggravate the occurrence of skin acne, so they can be used as a basis for judging skin acne.Through the form of data, the situation of porin can be seen more clearly and intuitively.
- The living environment of propionibacterium acnes and malassezia must have oil, so they can be used as a basis for judging the accumulation of oil in skin pores.

21 Detection function







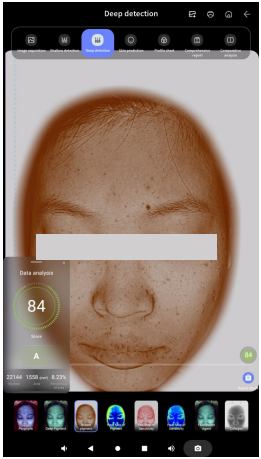


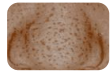
Deep Pigment

Image Analysis

- The bottom part of the figure shows wood's light. The yellow area represents the comprehensive color spot area identified by the algorithm and is marked with polygonal curves. This way, the situation of deep pigmentation can be seen more clearly and intuitively in the form of data.
- The dark (black, brown) block or dot skin that appears on the face is a display of skin pigmentation (such as melasma, freckles, malar spots, inflammatory pigmentation, acne marks, hemoglobin aggregation, etc.).
- The pigmentation in the deep layer of the skin can be compared with the sensitivity to determine whether it is an inflammatory hemoglobin accumulation or a spot problem.

21 Detection function



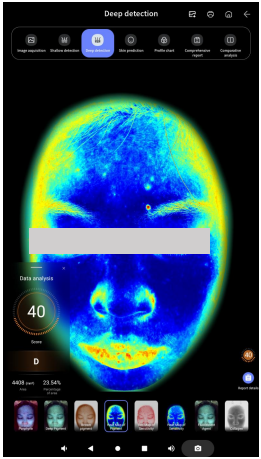


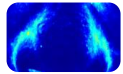
Brown Pigment

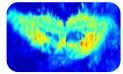
Image Analysis

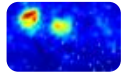
- The depth of the overall brown color of the skin is mainly related to the skin color. People with darker skin or more hemoglobin have darker overall pigmentation.
- The areas with heavier pigmentation in the image are mostly those with higher pigment concentration density.
- Through the form of data, the brown pigment can be seen more clearly and intuitively.

21 Detection function







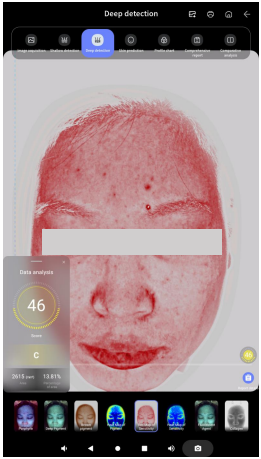


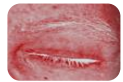
Heat Map of Pigment

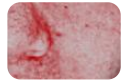
As shown in these images

- Heat map of pigment can check the distribution of pigment deep in the skin.
- The algorithm identifies the distribution of pigments on the face and presents it in the form of a heat map. Different colors are used to represent the distribution of spots, moles, and scars visible to the naked eye under negative polarized light. Red indicates severe skin pigmentation, yellow for medium, green for lighter skin, and blue for normal skin.The situation of pigmentation can be seen more clearly and intuitively through the form of data.
- Pigment production mechanism: the body's own regulation, physical or chemical factors stimulate melanocytes, so that their number increases and activity increases. The melanin produced cannot be completely removed with the stratum corneum and blood circulation, and finally deposits in the local skin.

21 Detection function





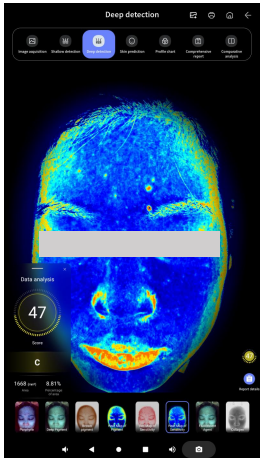


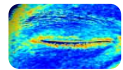
Red Map of Sensitivity

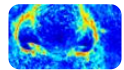
As shown in these images

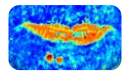
- In the Red Map of Sensitivity, we can observe the redness of the skin's surface layer and the distribution of red blood vessels.
- The picture clearly shows the distribution of red blood vessels, indicating that the skin is thin and sensitive, and requires proper protection and care.
- The shade of the background color in the red photo is related to the overall skin tone. Those with less hemoglobin will have a lighter color.
- The areas with a higher concentration of red color indicate a more concentrated accumulation of hemoglobin in the skin, which can be used as a reference for judging the sensitivity of the skin and the presence of inflammatory areas. The degree of skin sensitivity can be clearly and intuitively seen through the data form.

21 Detection function









Heat Map of Sensitivity

As shown in these images

- The heat map of sensitivity represents skin sensitivity. When the skin shows significant redness and thinning of the stratum corneum, it becomes more susceptible to external stimuli and damage, leading to issues such as dryness, sensitivity, and redness.
- The heat map of sensitivity is based on the distribution of subcutaneous capillaries, with areas of greater sensitivity having more capillaries. Visible redness and acne on negative polarized light images indicate areas of severe sensitivity.
- The algorithm uses different colors to indicate varying degrees of sensitivity and their distribution on the skin. Areas with severe sensitivity are shown in deep red, including the lips; medium sensitivity is represented in yellow, mild sensitivity in green, and normal skin appears in blue.The sensitivity is more clearly and intuitively reflected in the form of data.

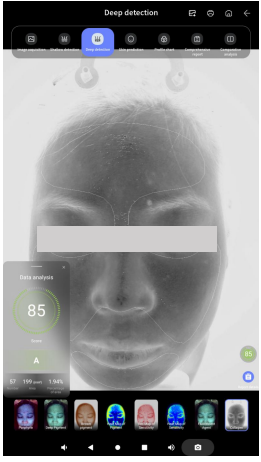
21 Detection function

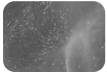
Fluorescent Agent

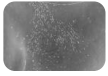
As shown in these images

- Fluorescent agent and pigments might both appear in facial imaging. To assess the fluorescent agent, focus specifically on the fluorescence response.
- The difference between fluorescent agent and porphyrins is as follows porphyrins exhibit brick-red fluorescent agent, while fluorescent agent display intense blue light and usually appear as large, sheet-like areas.
- The difference between fluorescent agent and facial .
- Dust is as follows facial dust appears as white, bright, floating, and short, wispy lines on the surface, while fluorescent agent typically display bright colors and are often more diffuse or spread over larger areas.

21 Detection function





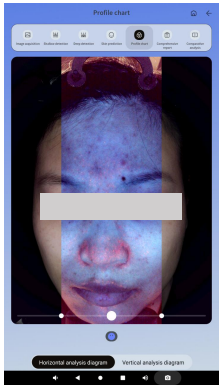


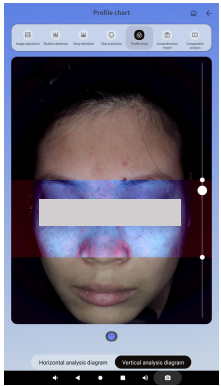
Collagen

As shown in these images

- Under the mixed light image, we can observe the loss of collagen on the skin surface.
- The mixed light image shows a situation where the skin texture is rough. For example: large pores on the skin, fine lines and wrinkles. It can be used as a reference for judging the skin's smoothness and the loss of collagen.
- The white dotted lines in the mixed light image indicate the loss of skin collagen and the rupture of elastic fibers. This way, the loss of collagen can be clearly and intuitively observed in a data form.

Profile chart





Profile chart

Through white light, negative polarized light and UV light source comparison, multi-dimensional, deep analysis of skin problems.

05

SERVICE

A5 AI INTELLIGENT SKIN TESTER

Our services

Meticulous craftsmanship

Original manufacturer

specialist service

After-sales service

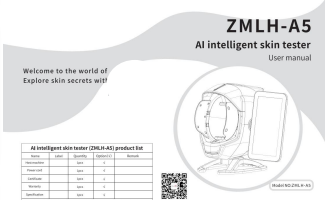
Training and guidance

Specialized teaching

Our services

【A5 AI intelligent skin tester】

Educational materials, user manuals, and instructional videos are all provided.



AI intelligent skin tester (ZMLH-A5) product list

Name	Unit	Quantity	Explain(+)	Remark
Host machine		1pcs	1	
Power cord		1pcs	1	
Certificate		1pcs	1	
Wireless		1pcs	1	
Specification		1pcs	1	

Dear customer: Please be sure to confirm whether the product accessories are complete before receiving the goods!

AI intelligent skin tester MAX version | operation explanation video

AI intelligent skin tester Plus version | operation explanation video

AI intelligent skin tester Plus version | Unboxing and installation video

Hyperbubble skin rejuvenator (Unboxing video)

Hyperbubble skin rejuvenator (function introduction)

Hyperbubble skin rejuvenator (Method explained)

Hyperbubble skin rejuvenator (How to operate it)

Welcome you join us