

Bitmoji<sup>®</sup> 摩玑

LEAD TECHNOLOGY CREATE BEAUTY

# X1 AI Intelligent Imager

X1 AI Intelligent Imager: With a research and development focus on solving skin problems, it integrates eight spectral imaging technologies and can professionally and objectively analyze twenty 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





# Catalogue

01

FUNCTION  
DEMO

02

PARAMETERS

03

EIGHT  
SPECTRAL  
IMAGE  
ANALYSIS

04

17 ITEMS  
INDICATORS

05

MICROSCOPIC  
DETECTION  
SKIN DETAILS

06

OUR  
SERVICE

07

BRAND  
COOPERATION  
ORGANIZATION



X1 Intelligent Imager

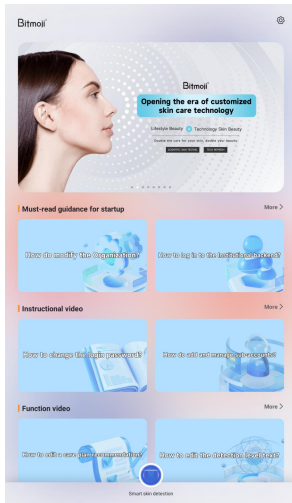
01

FUNCTION  
DEMO

Must-read guidance  
for startup

Instructional video

Function video



Click on the setting to adjust  
the parametersters

Banner

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

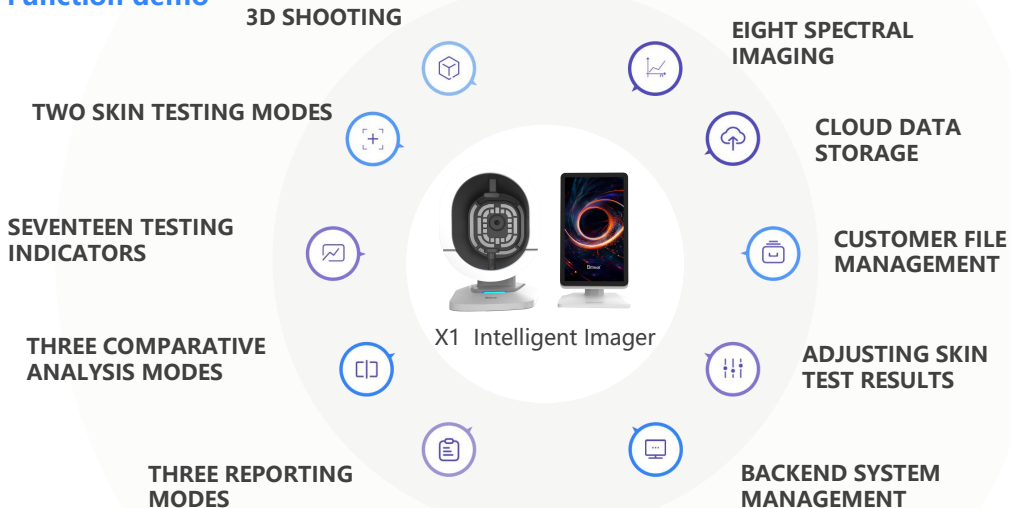


Wrinkle

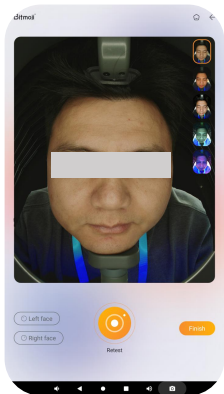


Moisture

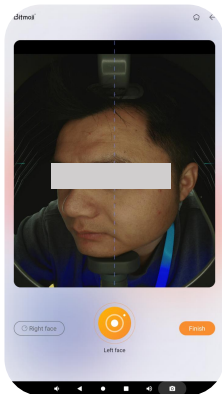
## Function demo



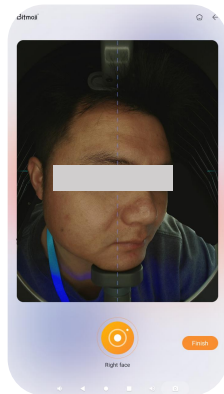
## 3D Shooting



Front face

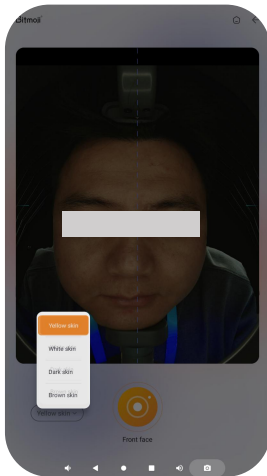


Left face



Right face

## Four skin tones available



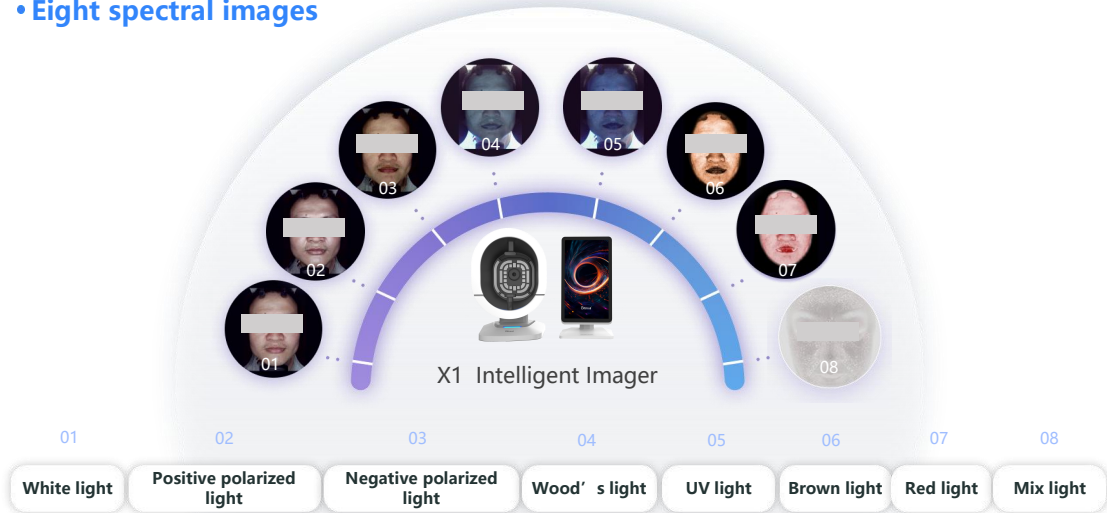
Yellow Skin

White skin

Dark skin

Brown skin

## • Eight spectral images



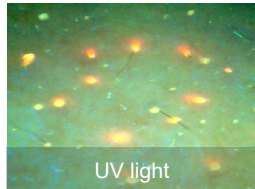
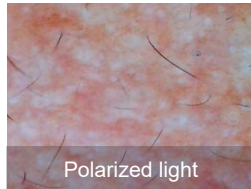
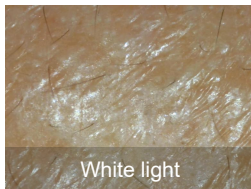
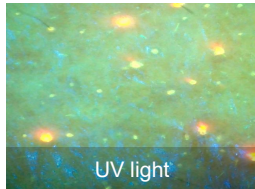


## Functional coverage

- Microscopic image presentation of skin detail problems



**Handheld skin microimager**



**Multiple light source targeting analysis**

## Seventeen testing indicators



Hydration



Pore



Blackhead



Lipid



Sensitivity



Acne



Wrinkle



Mixed spot



Superficial pigment



X1 Intelligent Imager



Porphyrin



Collagen



Fluorescent agent



Deep pigment



Brown pigment



Sensitive thermogram

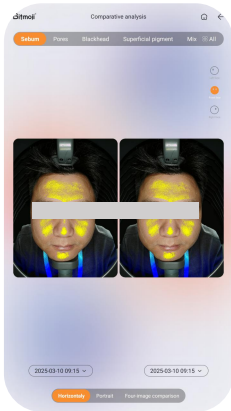


Pigment thermogram

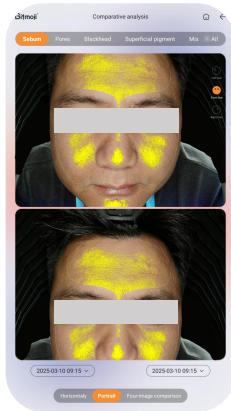


Sensitive rubein map

## Three comparison modes



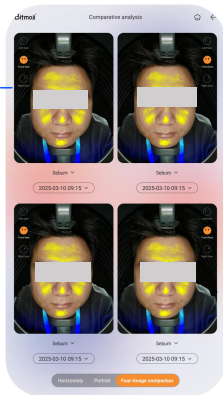
Parallel comparison



Vertical comparison

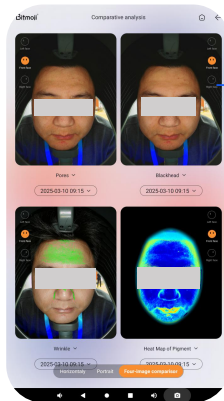
## Three comparison modes

Comparison of the effects of single indicators before and after.



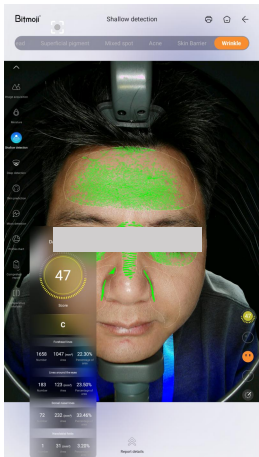
Comparison of four figures

Analysis and comparison of multiple problem indicators before and after skin care.



Comparison of four figures

## Single independent reporting



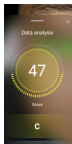
### Introduction to data analysis

- 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

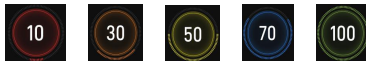


It is divided into 5 levels according to the skin condition from high to low and marked with different colours.

A Green B Blue C Yellow D Orange E Red

### Multidimensional perspective

Multi-image comprehensive image display



E

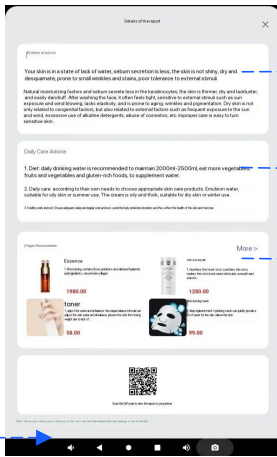
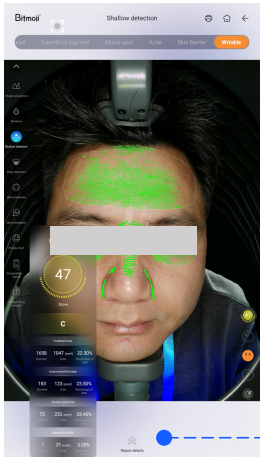
D

C

B

A

### Three reporting modes-single independent report



## Problem analysis

### Nursing advice

### Scheme recommendation

Slide the arrow up to a pop-up window of a single report.

## Three reporting modes-Comprehensive analysis report



Personal information 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

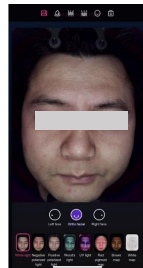
Deep test

## Three reporting modes-comprehensive analysis report



### Single report

For the text report of a single test item (problem analysis and daily care advice), the system will update in real time according to the level score in the state at that time with five different scoring levels.



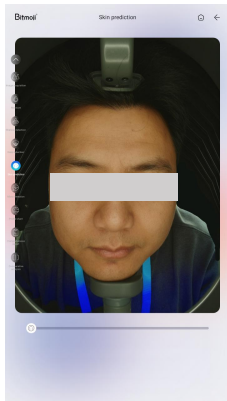
### Download the report

H5 Mobile phone report

Scan the code on your mobile phone to get the report



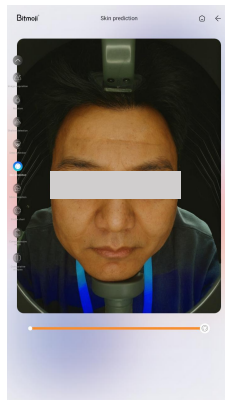
## Skin prediction



Skin prediction

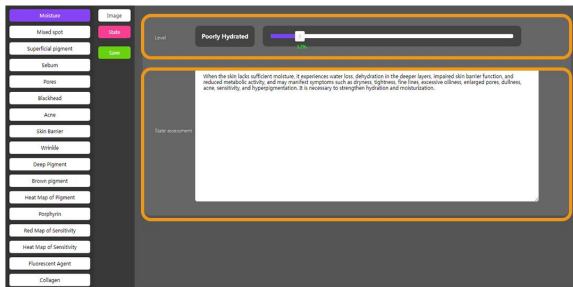
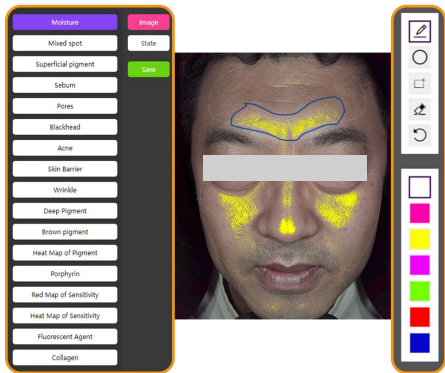
Deeply predict the future of the skin and awaken customers' desire for young skin.

According to the customer's current skin condition, AI algorithm is used to simulate the ageing situation of different ages to realise the prediction of skin ageing.



Skin prediction

## Innovative self-editing reports



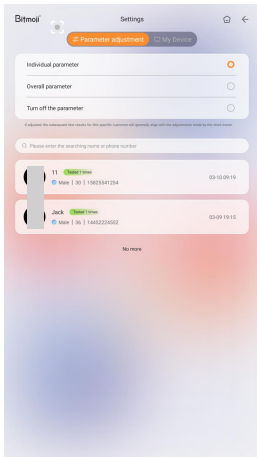
The background automatically selects the image to be edited for annotation

Customize any test results you want

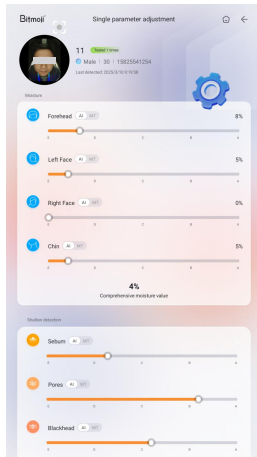
You can debug results for each indicator

Free copy editing

## Manual optimization of detection projects



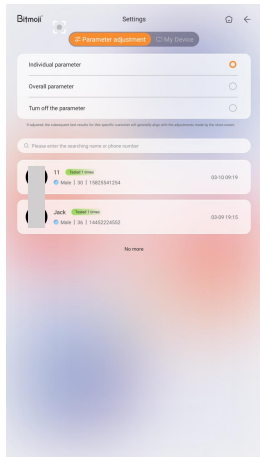
Parameter adjustment



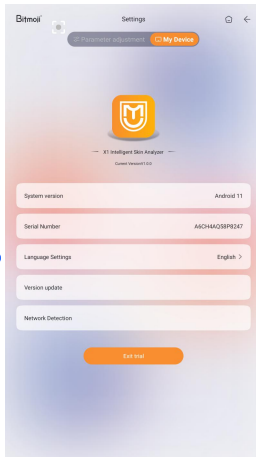
Data result optimization manual debugging

It can be adjusted as a whole

## Test items for My equipment



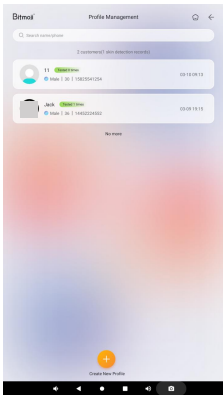
The language  
can be adjusted



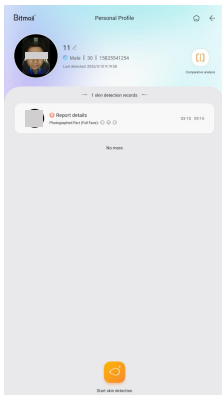
Serial number

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

## Cloud storage file management



File Management



Profile

Cloud storage

One click search

Number of skin tests

## Backend management



Recording  
nursing  
project freely

Unified  
management  
of multiple  
equipments

Customer  
profile  
management  
in real-time

Review  
and edit  
detection  
record in  
real-time



X1 Intelligent Imager

02

PARAMETERS

## Hardware parameters

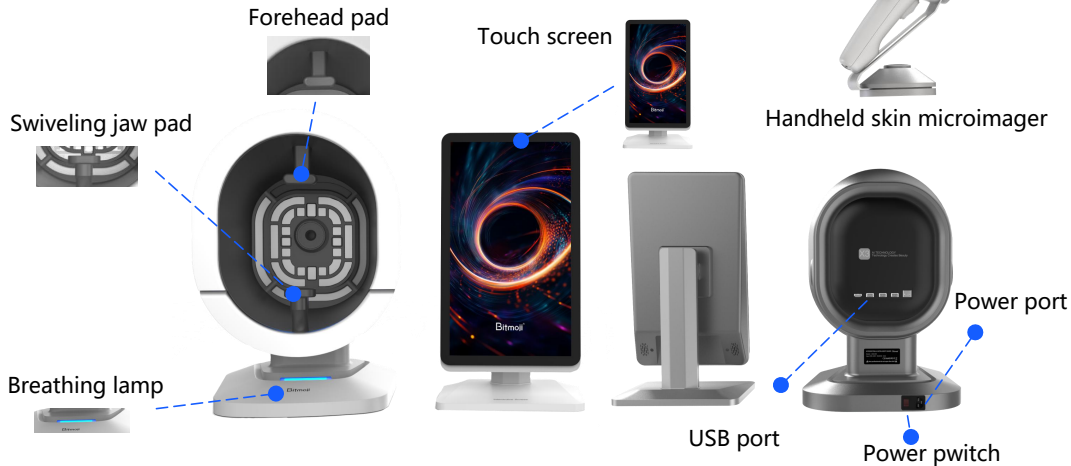
### Parameter information

**X1**

Type number	X1
Image element	Industrial grade 36 million
Light spectrum	White light, positive polarization, negative polarization, Wu, UV, erythroid, brown, white, Pull-down hood
Shading mode	Industrial grade ABS
Product material	AC100-260V,50/60Hz
Electric source	368 x 368 x 550mm
Product size	The RK3568 quad-core Cortex-A55 has a maximum frequency of 2.0GHz
Central processing unit	R10-S6810 motherboard with Android11 system
Main plate	Dual channel LP DD R4, 4G
Internal memory	MMC5.1, 32G
Hard disk	Multipoint capacitive touch
Mode of operation	Individual screen
Screen feature	Built-in dual-band WIFI(2.4G, 5G)
WIFI	1 Pcs
HDMI	3 Pcs
USB	16:9
Screen scale	20.5 inches
Screen size	1920 * 1080



## Hardware parameters





X1 Intelligent Imager

03

EIGHT  
SPECTRAL  
IMAGE  
ANALYSIS

## Eight spectral image analysis



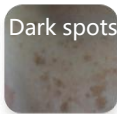
White light

### THEORY

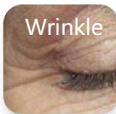
Visible spots and other blemishes on the skin surface (acne, spots, wrinkles, pores, etc.) under natural light sources, which are mainly used as the basis for other spectral image comparison.



Acne



Dark spots



Wrinkle



Pore

## Eight spectral image analysis



Positive polarized light

### THEORY

Positive polarized light can improve the clarity of superficial 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.

Dark spots



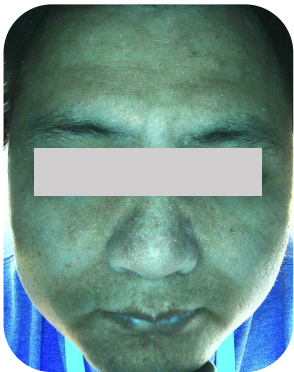
Pigment



Acne



## 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.

Spots

Spots

Fluorescence

## 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.



Porphyrin



Fluorescence

## 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

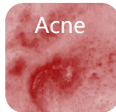


Red light

### THEORY

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

Acne



Blood  
streak



Mole



## Eight spectral image analysis



Mixed light

### THEORY

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

Rough  
texture

Wrinkle



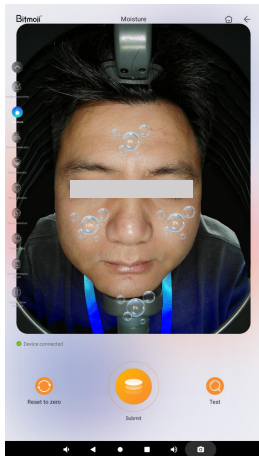
X1 Intelligent Imager

04

20

Detection  
function

## 20 Detection function-Moisture test report 1



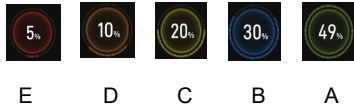
### Zoned moisture detection

Partition detection of skin and facial moisture

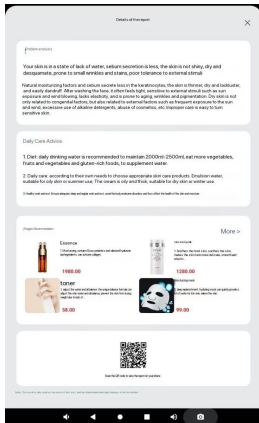
### Skin water content score



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



## 20 Detection function-Moisture test report 2

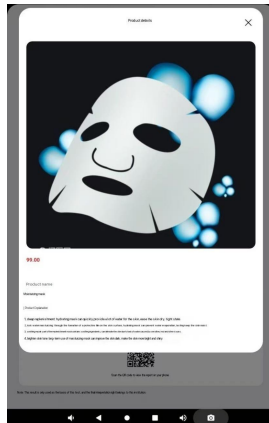


Problem analysis

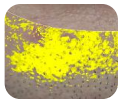
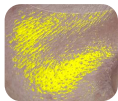
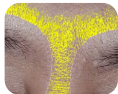
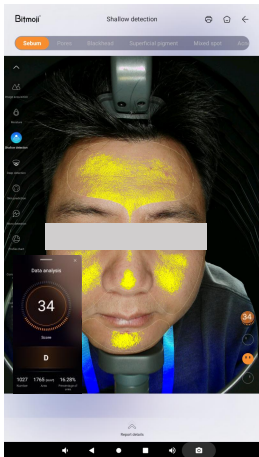
Nursing advice

Scheme recommendation

Scan the code to view the report



## 20 Detection function

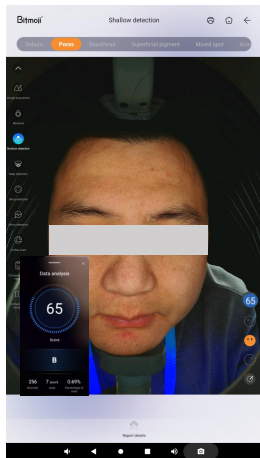


### Sebum/Oil

#### 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 fluorescence, 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.

## 20 Detection function

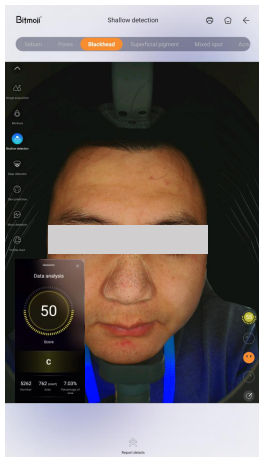


### Pores

#### Image Analysis

- ❑ Under negative polarized light source, it is possible to check if enlarged pores have formed on the skin surface.
- ❑ The algorithm uses RBX technology to display areas with enlarged pores in the skin by deepening the color of the pores; The pores in the facial skin can be seen more clearly and intuitively through the form of data.
- ❑ 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.

## 20 Detection function



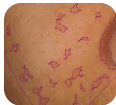
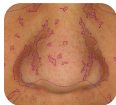
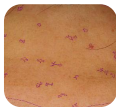
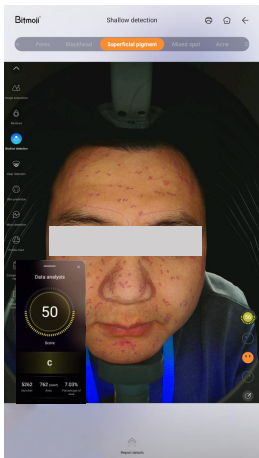
### Blackheads

#### Image Analysis

- ❑ Under negative polarized light source, you can see blackheads formed by pores clogged by oil in the T-zone.
- ❑ The algorithm uses RBX technology to highlight the blackheads in the T-zone by deepening their color; The blackheads of the nose can be seen more clearly and intuitively 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.



## 20 Detection function

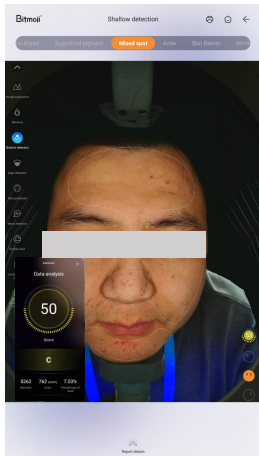


### Superficial Pigment

#### Image Analysis

- ❑ Superficial pigmentation 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.

## 20 Detection function

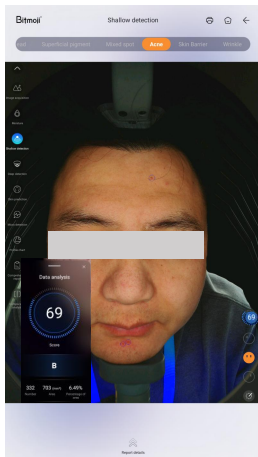


## Mixed Spots

## 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.

## 20 Detection function

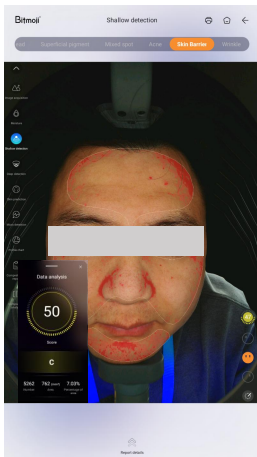


### Acne

#### 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.

## 20 Detection function

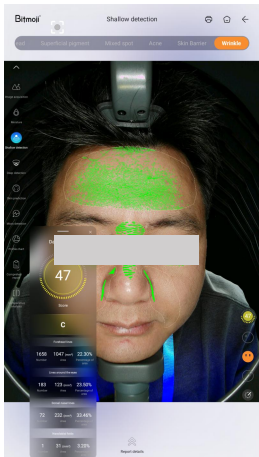


### Skin Barrier

#### 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 red area indicates that the skin barrier is damaged, which can be used as a reference for judging the skin sensitivity and inflammation area. The damage to the barrier can be seen more clearly and intuitively through the form of data.

## 20 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 lines of the facial skin and marks the distribution of the five parts of the skin wrinkles (head-up lines, nose-back lines, peri-eye lines, crow's tail lines, decree lines) with a green short line. The more intermittent lines, the rougher the skin. You can see the wrinkles more clearly and intuitively through the form of data.

## 20 Detection function

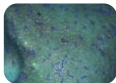
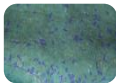
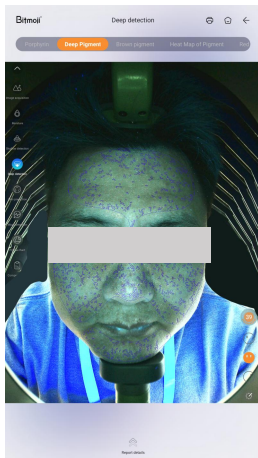


### Porphyrin

#### 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.

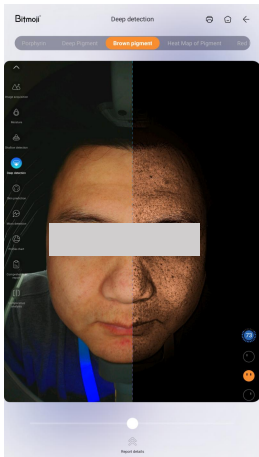
## 20 Detection function



### Deep Pigment Image Analysis

- ❑ The green color of the whole face in the picture is Wood's light, and the color is not analyzed for problems.
- ❑ The purple area is the facial comprehensive spot area identified by the algorithm and marked with a polygonal curve. Through the form of data, the situation of deep pigments can be seen more clearly and intuitively.
- ❑ 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.

## 20 Detection function



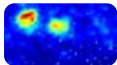
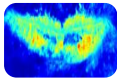
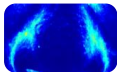
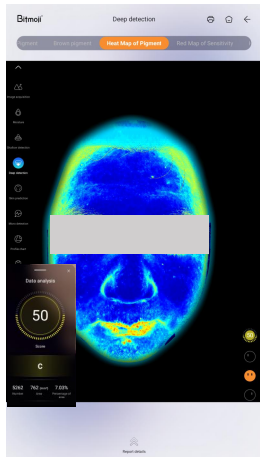
### Brown Pigment

#### 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.



## 20 Detection function

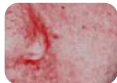
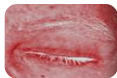
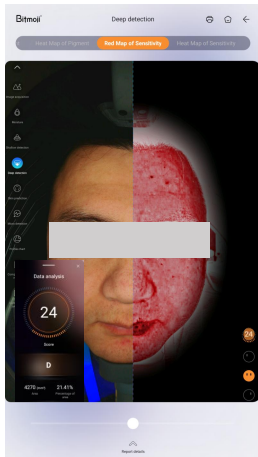


### Pigment Heat Map

As shown in these images

- ❑ Pigment heat map 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, increasing their number and enhancing their activity. The melanin produced cannot be completely excreted with the stratum corneum and blood circulation, and eventually deposits in the local skin.

## 20 Detection function

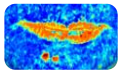
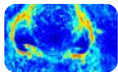
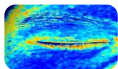
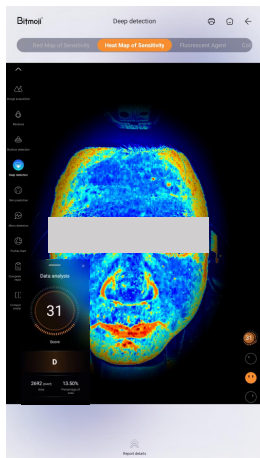


### Sensitive red pigment map

#### As shown in these images

- ❑ Under negative polarized light source, we can check the redness of the superficial layer of the skin and the distribution of red blood vessels.
- ❑ Clear distribution of red blood vessels in polarized light indicates that the skin has thin cuticle and is sensitive, requiring proper protection and care.
- ❑ The depth of the hemoglobin base color is related to the overall skin color. People with less hemoglobin will have a lighter color.
- ❑ Areas with more concentrated red represent areas where skin hemoglobin accumulation is more concentrated, which can be used as a reference for judging skin sensitivity and inflammation areas. Through the form of data, you can see the degree of skin sensitivity more clearly and intuitively.

## 20 Detection function

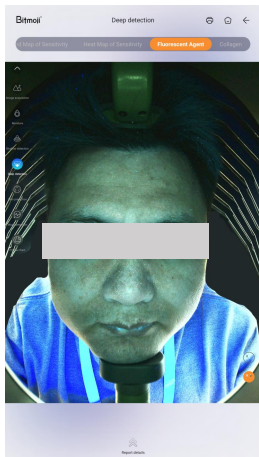


### Sensitivity Heatmap

As shown in these images

- ❑ The "sensitivity heatmap" 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 sensitive heatmap 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.

## 20 Detection function

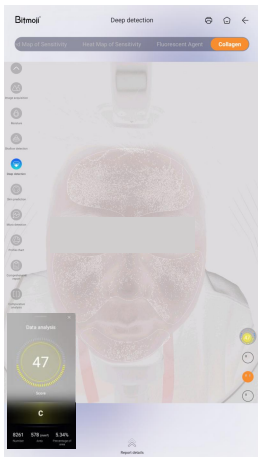


### Fluorescent Agent

#### 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 agents and porphyrins is as follows: Porphyrins exhibit brick-red fluorescent spots, while fluorescent dyes display intense blue light and usually appear as large, sheet-like areas.
- ❑ The difference between fluorescent agents and facial dust is as follows: Facial dust appears as white, bright, floating, and short, wispy lines on the surface, while fluorescent dyes typically display bright colors and are often more diffuse or spread over larger areas.

## 20 Detection function

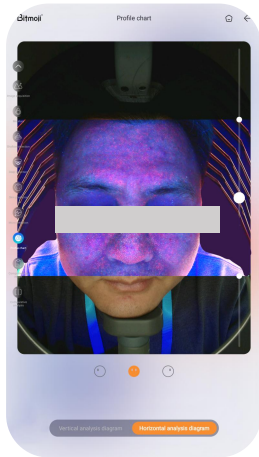
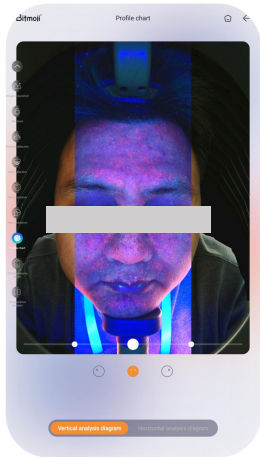


### Collagen

As shown in these images

- ❑ Under polarized light, we can assess the loss of collagen on the skin's surface.
- ❑ Mixed light images reveal skin texture issues such as enlarged pores, dry lines, fine lines, and wrinkles. They serve as a reference for evaluating skin smoothness and collagen loss.
- ❑ In mixed light images, a higher number of discontinuous lines indicates rougher skin texture and more severe collagen loss. The sensitive process is more clearly and intuitively reflected in the form of data.

## Profile chart



### Profile chart

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

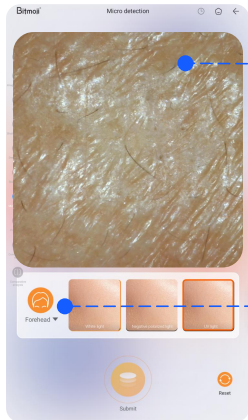


X1 Intelligent Imager

05

MICROSCOPIC  
DETECTION  
SKIN DETAILS

# Microscopic detection - Skin Details



Local microscopic display

Part marking: Convenient for labeling



Multiple light sources detect skin problems

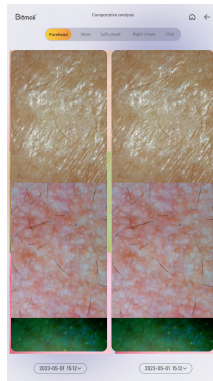
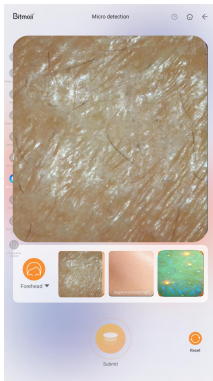
Handheld skin microimager



# Microscopic detection - Skin Details



Independent  
record  
tracking for  
each customer



Comparison  
display for the  
same area



X1 Intelligent Imager

06

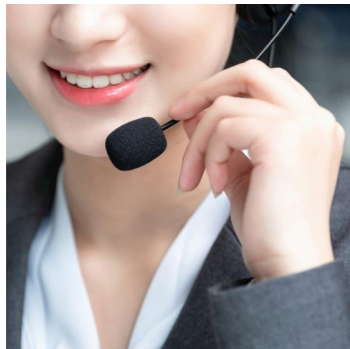
OUR  
SERVICE

## Our services



Meticulous  
craftsmanship

Original  
manufacturer



Specialist  
service

After-sales  
service



Training and  
guidance

Specialized  
teaching

# Our services

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





X1 Intelligent Imager

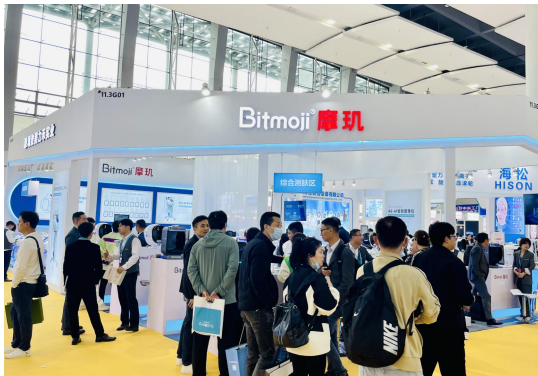
07

BRAND COOPERATION  
ORGANIZATION

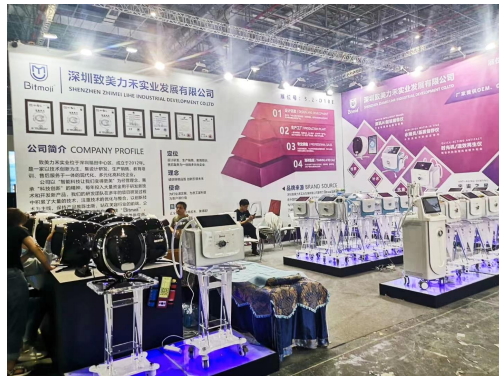
## Brand cooperation organization



## Exhibition Display



Guangzhou Beauty Expo



Shanghai Hongqiao Exhibition

Bitmoji® 摩玑

# Continuous Innovation . Leading Technology . Intelligent Skin Care

BitMoji-A6



BitMoji-A3



BitMoji-2.0 Pro



BitMoji-Renewal Machine



BitMoji-Time Machine



BitMoji-Plus



BitMoji-Max





## Display of product patents, testing reports, and certification certificates



# Welcome you join us!