

Bitmoji<sup>®</sup> 摩玑

LEAD TECHNOLOGY CREATE BEAUTY

# X3 AI Intelligent Imager

**X3 AI Intelligent Imager:** With a research and development focus on solving skin problems, it integrates fourteen 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

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FUNCTION  
DEMO

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ANALYSIS

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17 ITEMS  
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05

MICROSCOPIC  
DETECTION  
SKIN DETAILS

06

OUR  
SERVICE

07

BRAND  
COOPERATION  
ORGANIZATION



X3 Intelligent Imager

01

FUNCTION  
DEMO



Click on the setting to adjust the parametersters

Banner

Video on Functions

Must-read instructions

Instructional video

Smart skin detection

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

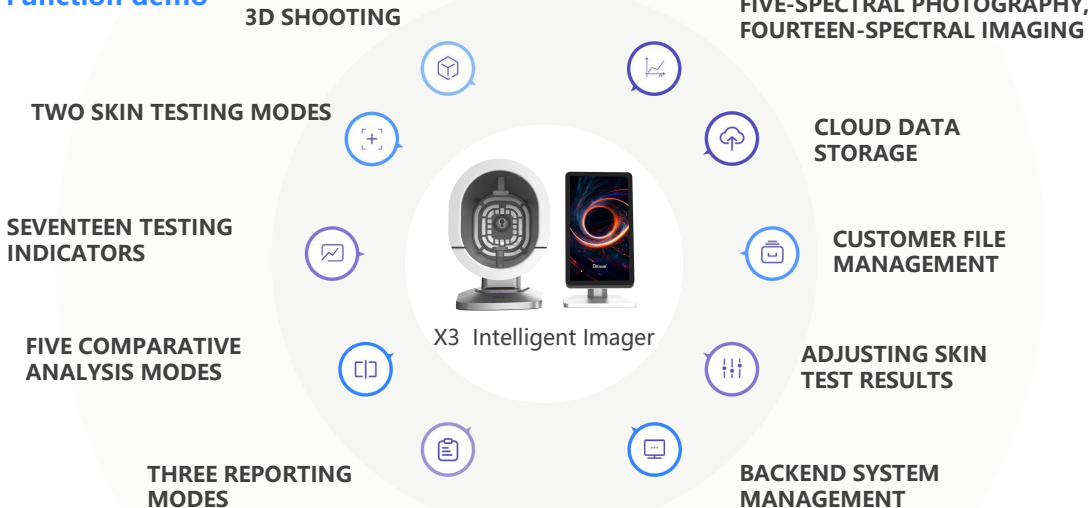


Wrinkle



Moisture

## Function demo



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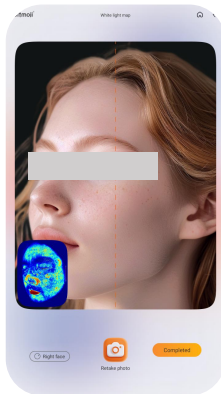
## 3D Shooting

【X3 Intelligent Imager】

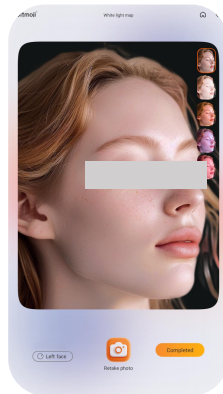
Lead technology create beauty



Front face

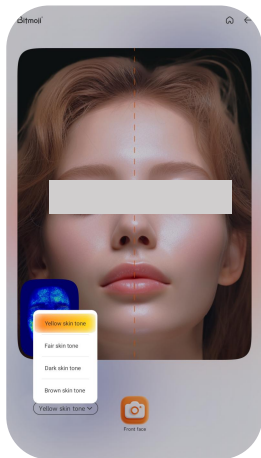


Left face



Right face

## Four skin tones available



Yellow Skin

White skin

Dark skin

Brown skin

## • Fourteen spectral images



01

02

White  
lightPositive  
polarized light

03

04

05

06

07

08

09

10

11

12

Superficial  
pigmentHeat Map of  
Sensitivity

13

14

Negative  
polarized light

Wood's light

UV light

Brown  
pigmentDeep spots  
green map

Sunspots

Superficial  
sensitivityRed Map of  
SensitivityHeat Map  
of Pigment

Sebum

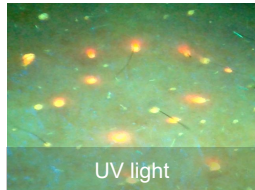
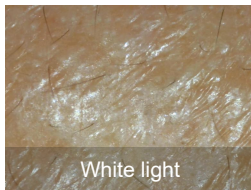
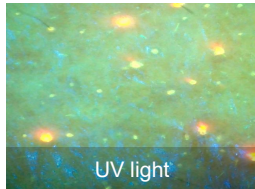


## Functional coverage

- Microscopic image presentation of skin detail problems



**Handheld skin microimager**



**Multiple light source targeting analysis**

## Seventeen testing indicators



Hydration



Pore



Blackhead



Sebum



Superficial sensitivity



Acne



Wrinkle



Sunspots



Superficial pigment



X3 Intelligent Imager



Porphyryn



Collagen



Fluorescent agent



Deep spots green map



Pigment brown map



Heat Map of Sensitivity

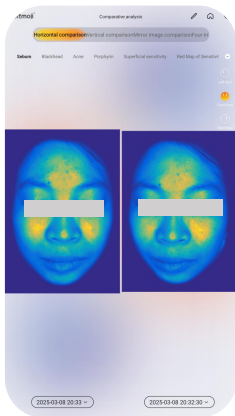


Heat Map of Pigment

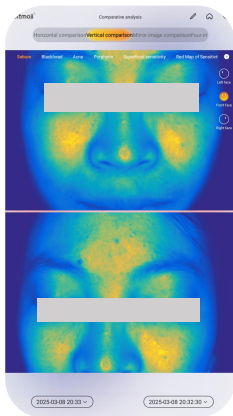


Red Map of Sensitivity

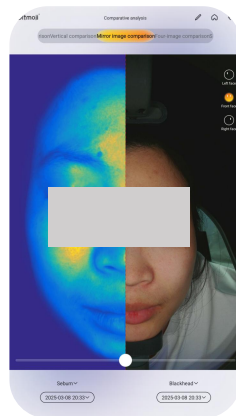
## Five comparison modes



Parallel comparison



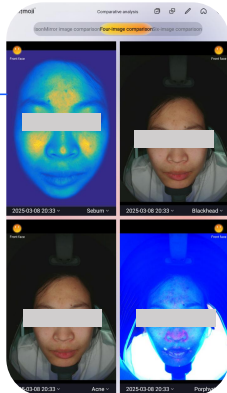
Vertical comparison



Mirror comparison

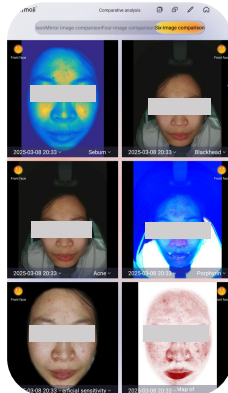
## Five comparison modes

Comparison of the effects of single indicators before and after.



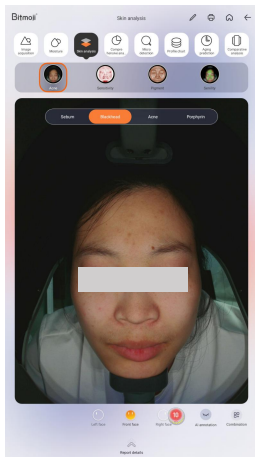
Comparison of four figures

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



Comparison of six figures

## Three reporting modes-single independent report



Introduction to  
data analysis

Data score



Multidimensional  
perspective

Multi-angle comprehensive image display

- 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

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



E

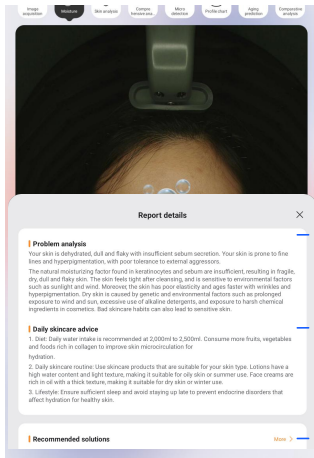
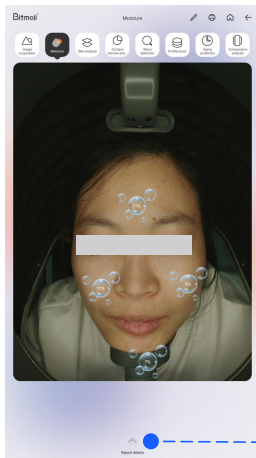
D

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

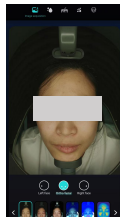
Deep test

## 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



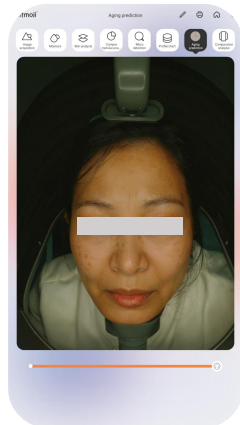
## Skin prediction



Skin prediction

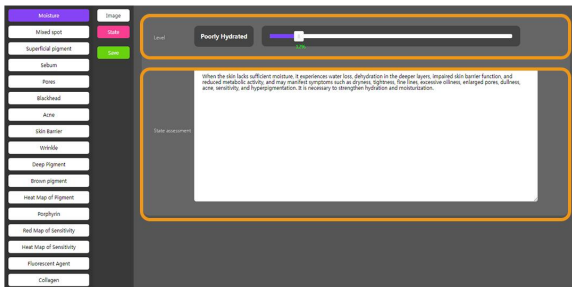
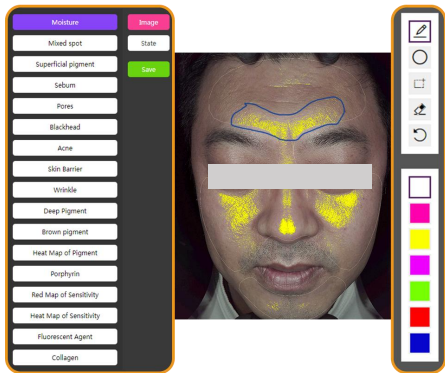
Deeply predict the future of the skin and awaken customers' desire for young skin.

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



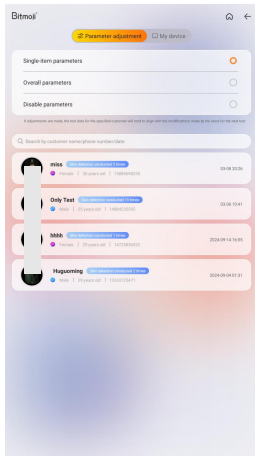
The background automatically selects the image to be edited for annotation

Customize any test results you want

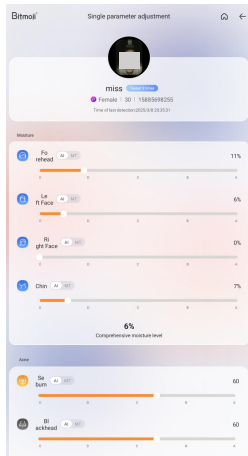
You can debug results for each indicator

Free copy editing

## Manual optimization of detection projects



Parameter  
adjustment

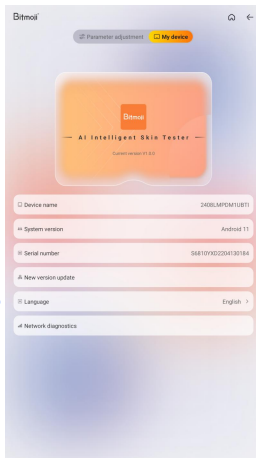


Data result  
optimization  
manual debugging

It can be adjusted as a  
whole

## Test items for My equipment

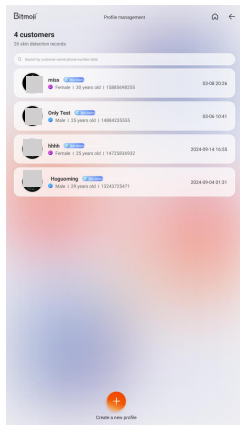
The language  
can be adjusted



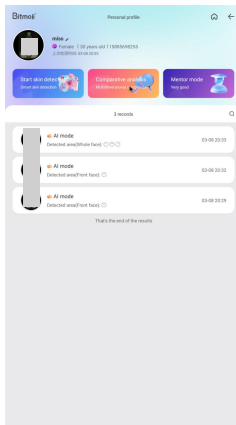
Serial number

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



X3 Intelligent Imager

02

PARAMETERS

## Hardware parameters

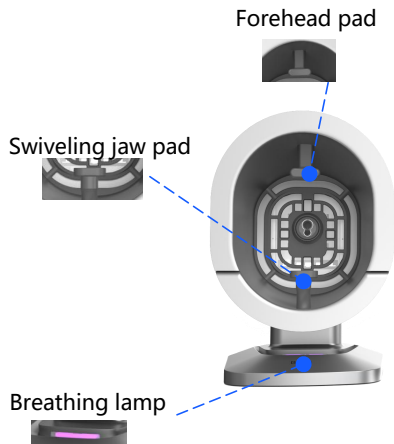
### Parameter information

**X3**

Type number	X3
Image element	Industrial grade 36 million
Light spectrum	White light, positive polarization, negative polarization, Wu, UV, brown pigment, deep spot green image, ultraviolet spot, Shallow sensitive map, sensitive erythrocin map, pigment heat map, shallow pigment map, sensitive heat map, oil
Shading mode	Pull-down hood
Product material	Industrial grade ABS
Electric source	AC100-260V.50/60Hz
Product size	368 x 368 x 550mm
Central processing unit	The RK3568 quad-core Cortex-A55 has a maximum frequency of 2.0GHz
Main plate	R10-S6810 motherboard with Android11 system
Internal memory	Dual channel LP DD R4, 4G
Hard disk	MMC5 .1, 32G
Mode of operation	Multipoint capacitive touch
Screen feature	Individual screen
WIFI	Built-in dual-band WIFI(2.4G, 5G)
HDMI	1 Pcs
USB	3 Pcs
Screen scale	16:9
Screen size	20.5 inches
Screen pixel	1920 * 1080



## Hardware parameters



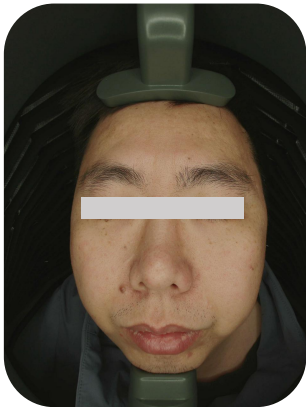


X3 Intelligent Imager

03

FOURTEEN  
SPECTRAL  
IMAGE  
ANALYSIS

## Fourteen spectral image analysis



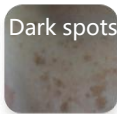
White light

### THEORY

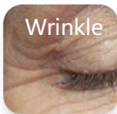
Visible spots and other blemishes on the skin surface (acne, spots, wrinkles, pores, etc.) under natural light sources, which are mainly used as the basis for other spectral image comparison.



Acne



Dark spots



Wrinkle



Pore

## Fourteen 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).



Wrinkle



Pore

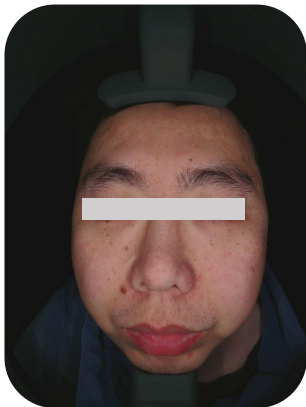


Acne scars



Acne

## Fourteen 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



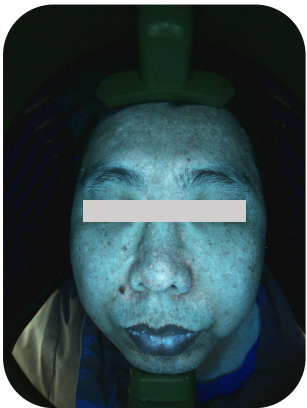
Pigment



Acne



## Fourteen spectral image analysis



Wood' s light

### THEORY

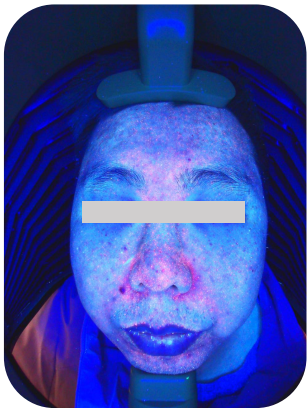
Wood' s light can detect deep pigments in dermis. The principle behind this is that melanin does not fluoresce after exposure to ultraviolet radiation, allowing melanin to stand out more clearly with stronger contrast.

Spots

Spots

Fluorescence

## Fourteen 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

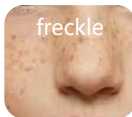
## Fourteen spectral image analysis



Brown pigment

### THEORY

The brown image can not only show deep pigmentation, such as the early manifestations of chloasma in the dermis, but also more obvious pigmentation in the superficial layer, such as moles, freckles, sun spots, uneven skin tone, etc.



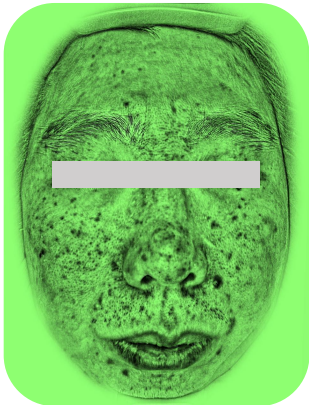
freckle



sunburn



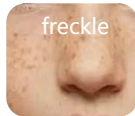
## Fourteen spectral image analysis



Deep spots green map

### THEORY

Under the green pigmentation map, the pigmentation condition of the underlying skin can be presented deeply and intuitively. For example, deep melasma, freckles and other spots can be more clearly displayed in terms of location, distribution range and color depth under the green map, helping to judge the severity of the pigmentation problem.

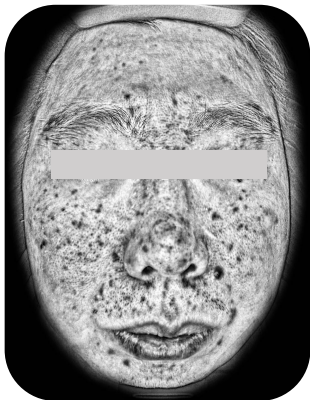


freckle



chloasma

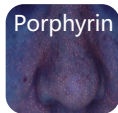
## Fourteen spectral image analysis



Sunspots

### THEORY

Under the pigment lead map, potential pigment spots under the epidermis can be detected, even early sun spots or potential sun spots that are difficult to detect with the naked eye can be displayed. If daily sun protection is not in place, more dark spots will appear.



## Fourteen spectral image analysis



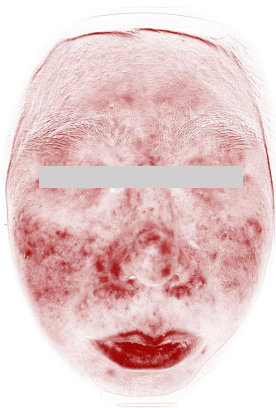
Superficial sensitivity

### THEORY

Under the light source, sensitive areas will appear noticeably red. If there is inflammation or an allergy, the area will be more obvious in the picture, and the scope and severity of the inflammation can be clearly seen.



## Fourteen spectral image analysis



Red of Sensitivity

### THEORY

The hemoglobin chart shows the distribution of red pigment in the superficial layer of the skin, which in turn reflects the status of hemoglobin in the skin. It can help observe whether the skin has problems such as redness and inflammation. If the color of a certain area is significantly darker, it may indicate inflammation, sensitivity or vasodilation in that area.

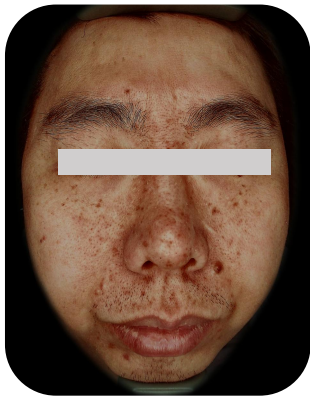


sensitive



red bloodshot

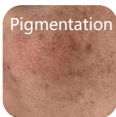
## Fourteen spectral image analysis



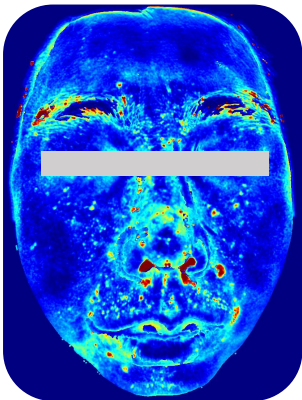
Superficial pigment

### THEORY

The superficial pigment map clearly shows the location, range and severity of superficial pigmentation and inflammation.



## Fourteen spectral image analysis



Heat Map of Sensitivity

### THEORY

Under the sensitivity heat map, you can clearly see the skin sensitive areas displayed intuitively in different colors, such as red for high sensitivity, yellow for moderate sensitivity, green for mild sensitivity, and blue for relatively normal. This allows professionals and users to quickly understand the distribution and range of skin sensitivity.

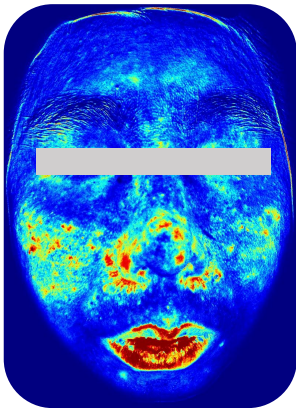
sensitive



Acne-prone skin



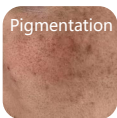
## Fourteen spectral image analysis



Heat Map of Pigment

### THEORY

The pigment heat map can clearly show the location, range and severity of spots, inflammation and uneven skin tone.

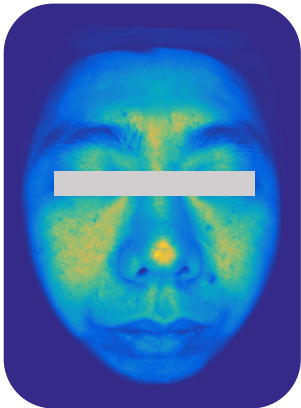


Pigmentation



Inflammation

## Fourteen spectral image analysis



Sebum

### THEORY

The bright yellow distribution is clearly shown in the image, which can clearly show the distribution and concentration of oil in each layer of the epidermis. Excessive oil secretion will affect the keratinization of the sebaceous gland duct of the hair follicle, causing blockage of the hair follicle opening, and then symptoms such as acne, papules, and pustules will appear on the surrounding skin.







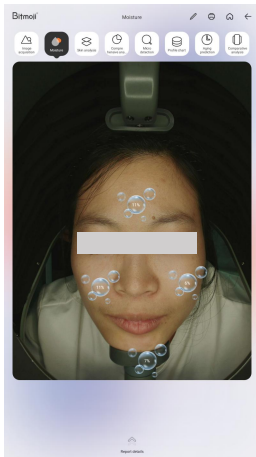
X3 Intelligent Imager

04

20

DETECTION  
FUNCTIONS

## 20 Detection function-Moisture test report 1



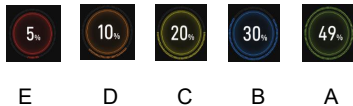
### Zoned moisture detection

Partition detection of skin and facial moisture

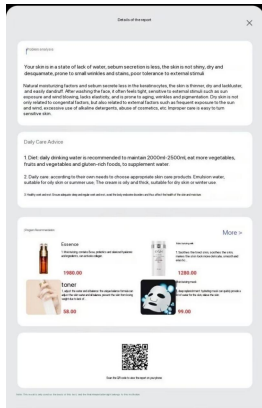
### Skin water content score



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

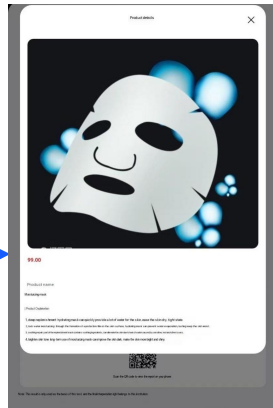


Problem analysis

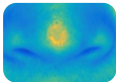
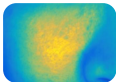
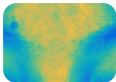
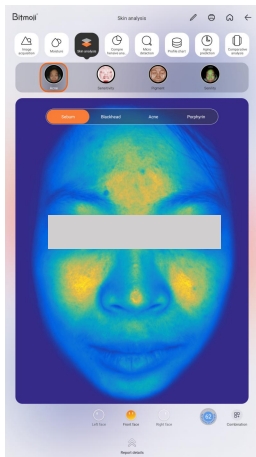
Nursing advice

Scheme recommendation

Scan the code to view the report



## 20 Detection function

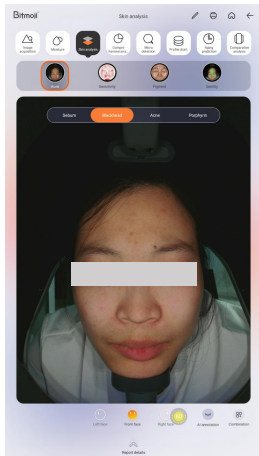


### Sebum/Oil

#### Image Analysis

- ❑ The oil secretion of the skin surface can be checked .
- ❑ 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

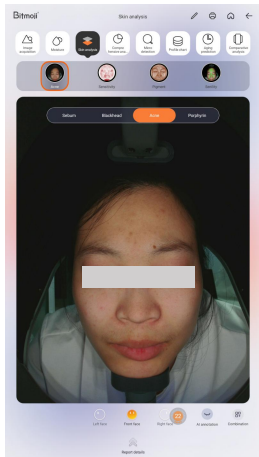


### Blackheads

#### 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

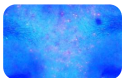
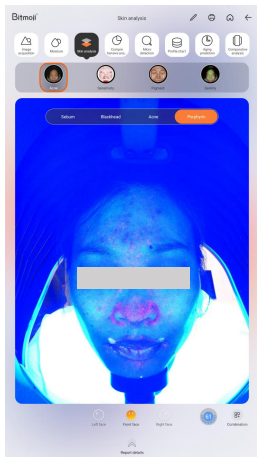


### Acne

#### 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

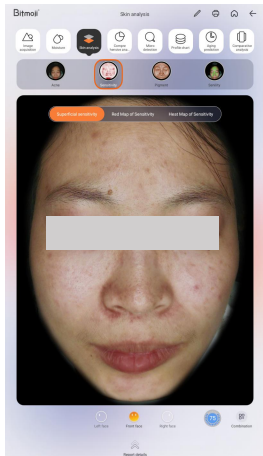


### Porphyria

#### 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



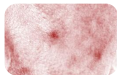
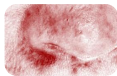
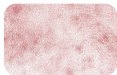
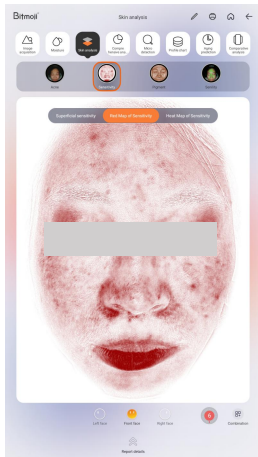
### Superficial sensitivity

#### Image Analysis

- ❑ We can check the skin barrier health under negative polarized light source.
- ❑ The barrier map 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 blood vessel 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.



## 20 Detection function

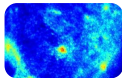
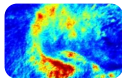
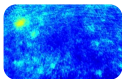
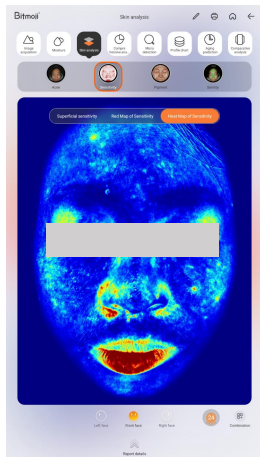


### Red Map of Sensitivity

#### Image Analysis

- ❑ We can check the distribution of hemoglobin in the dermis and subcutaneous tissue of the skin.
- ❑ Clear hemoglobin in the image means that the skin is thin and sensitive, prone to itching, stinging and other discomforts.
- ❑ Areas with more concentrated red represent areas where hemoglobin accumulates more concentratedly in the skin, which can be used as a reference for judging the degree of skin sensitivity and inflammation areas.

## 20 Detection function

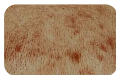
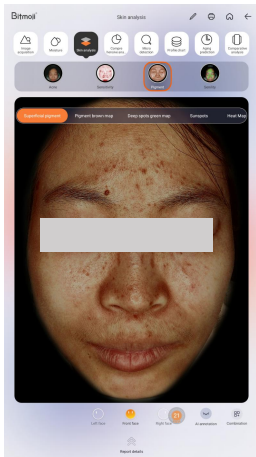


### Heat Map of Sensitivity

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 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.

## 20 Detection function

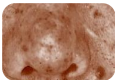
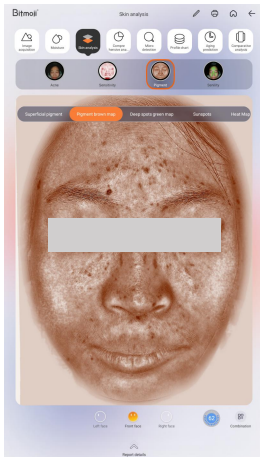


### Superficial Pigment

#### 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 situation of brown pigment can be clearly and intuitively seen in the form of data.

## 20 Detection function

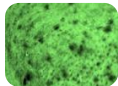
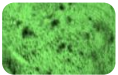
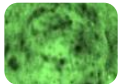
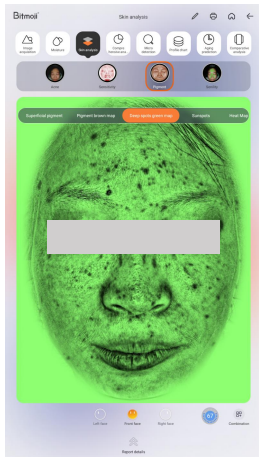


### Brown Pigment

#### 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

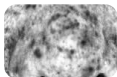
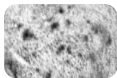
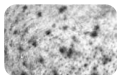
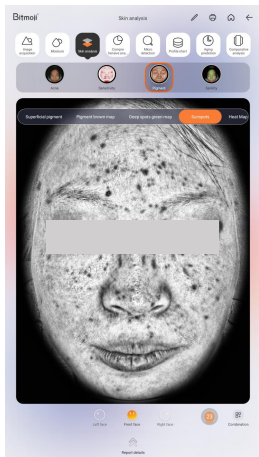


### Deep spots green map

#### Image Analysis

- ❑ The black area in the image is the area of facial comprehensive pigmentation identified by the algorithm. The deep pigmentation can be seen more clearly and intuitively in the form of data.
- ❑ The dark (black, gray) block or dot-shaped skin 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 pigmentation problem.

## 20 Detection function

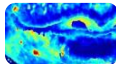
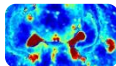
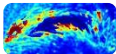


### Sunspots

#### Image Analysis

- ❑ The black area in the image is the facial comprehensive spot area identified by the algorithm. The deep sunburn situation can be seen more clearly and intuitively in the form of data.
- ❑ The dark (black, gray) block or dot-shaped skin that appears on the face is a display of skin pigmentation.
- ❑ UV spots usually refer to skin spots caused by ultraviolet radiation, and common ones include sunburn, chloasma, and aggravated freckles.

## 20 Detection function

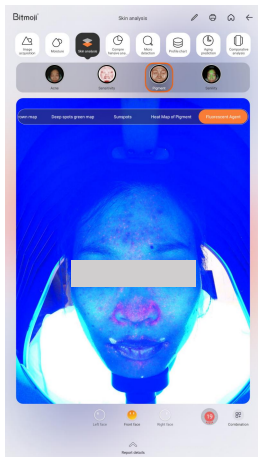


### Pigment Heat Map

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.
- ❑ 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



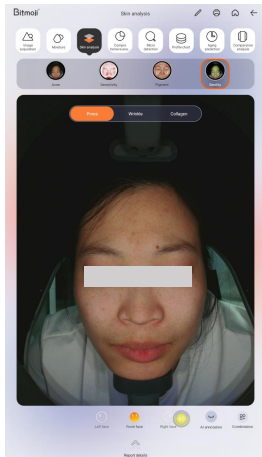
### Fluorescent Agent

#### 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

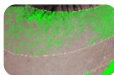
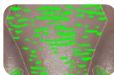
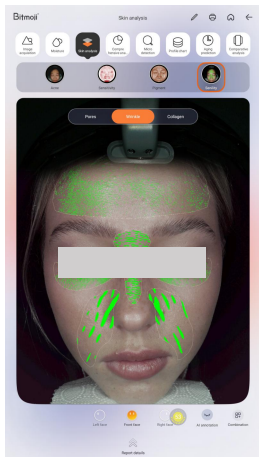


### Pores

#### 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

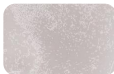
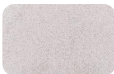
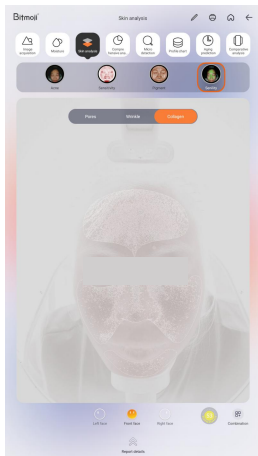


### Wrinkle

#### 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

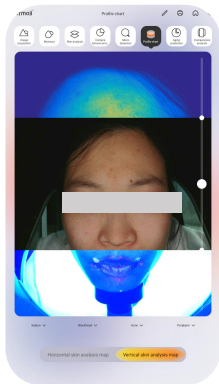
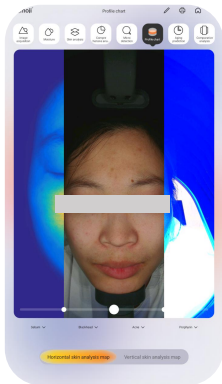


### Collagen

#### 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 UV light, Red pigment map, Wood's light and collagen source comparison, multi-dimensional, deep analysis of skin problems.

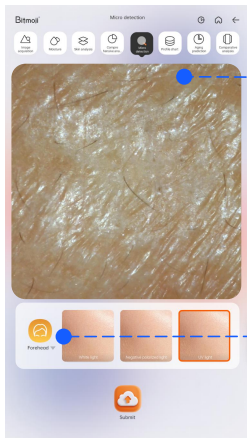


X3 Intelligent Imager

05

MICROSCOPIC  
DETECTION  
SKIN DETAILS

# Microscopic detection - Skin Details



Local microscopic display

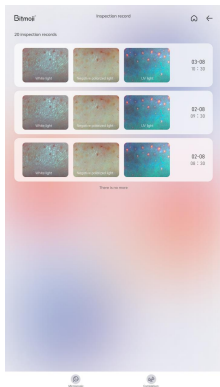
Part marking: Convenient for labeling



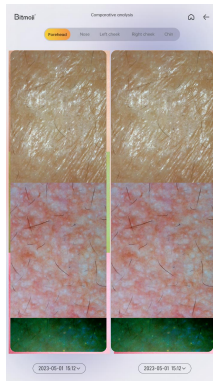
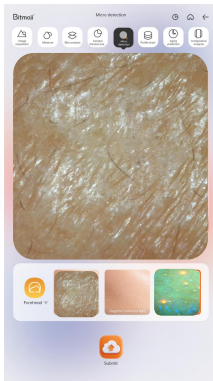
Multiple light sources detect skin problems

Handheld skin microimager

# Microscopic detection - Skin Details



Independent  
record  
tracking for  
each customer



Comparison  
display for the  
same area



X3 Intelligent Imager

06

OUR  
SERVICE



## Our services



Meticulous  
craftsmanship

Original  
manufacturer



Specialist  
service

After-sales  
service



Training and  
guidance

Specialized  
teaching

# Our services

【X3 Intelligent Imager】

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





X3 Intelligent Imager

07

BRAND COOPERATION  
ORGANIZATION

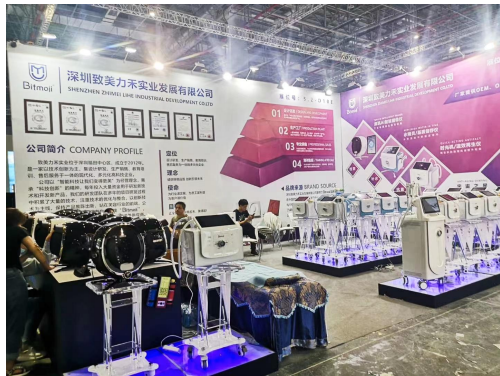
## Brand cooperation organization



## 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!