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SHINING 3D DENTAL

MetiSmile-MR

Face Scanner & Mandibular Movement Tracking System

A Functional and Aesthetic Prosthetic Solution

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SAY HELLO TO MetiSmile-MR

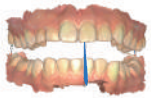
MetiSmile-MR is a facial scanner equipped with the capability to record mandibular movement trajectories. This groundbreaking innovation enables the simple and precise capture of both 3D facial data and dynamic occlusion using a single device. Powered by a robust software platform, **MetiSmile-MR seamlessly integrates intraoral, facial, jaw motion, and CBCT data–delivering a comprehensive solution that unites aesthetics and functionality in digital dental treatment.**

- Mandibular Trajectory Tracking
- Facial Aesthetic Analysis
- Orthodontic Facial Simulation
- Digital Smile Design *(Upcoming)*

Powerful Software for Virtual Patient Creation

Intraoral Data

Facial Data



Mandibular Movement Trajectory

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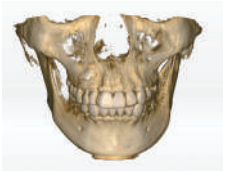

CBCT Data

Benefits

- > Supports direct DICOM data segmentation and auto-alignment
- > Multi-modal data aligned and analyzed in one coordinate system
- > Compatible with exocad software

exocad

Design

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Fabricate (Lab or In-house)

Flexible Module Selection

The mandibular movement tracking feature offers three software modules that can be tailored to fit different clinical treatment needs.

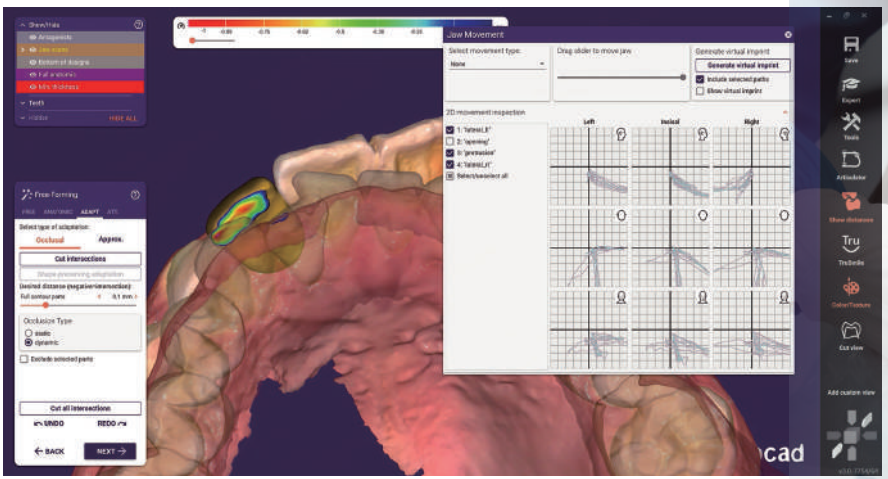
Mandibular Movement Trajectory Tracking (Standard)

Optimal Jaw Relation Determination (Optional)

Mandibular Movement Trajectory Analysis (Optional)

Mandibular Movement Trajectory Tracking

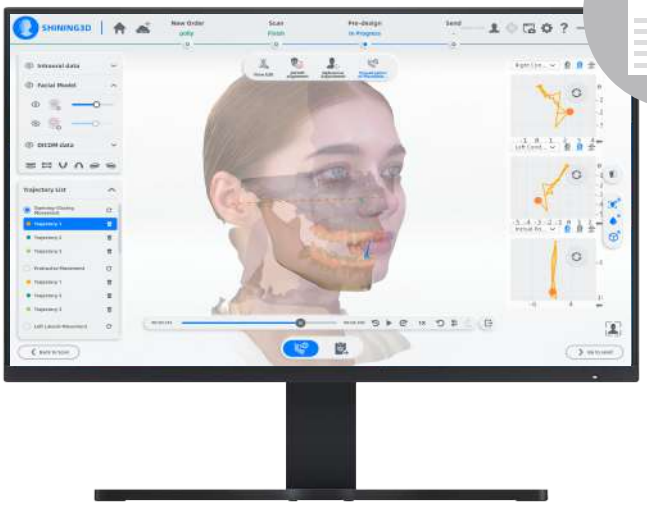
By accurately capturing the patient's mandibular movement with MetiSmile-MR and integrating intraoral scan data, digital dynamic occlusal contacts can be obtained. This helps identify and eliminate premature occlusal contacts, enabling long-term, stable restorative outcomes.

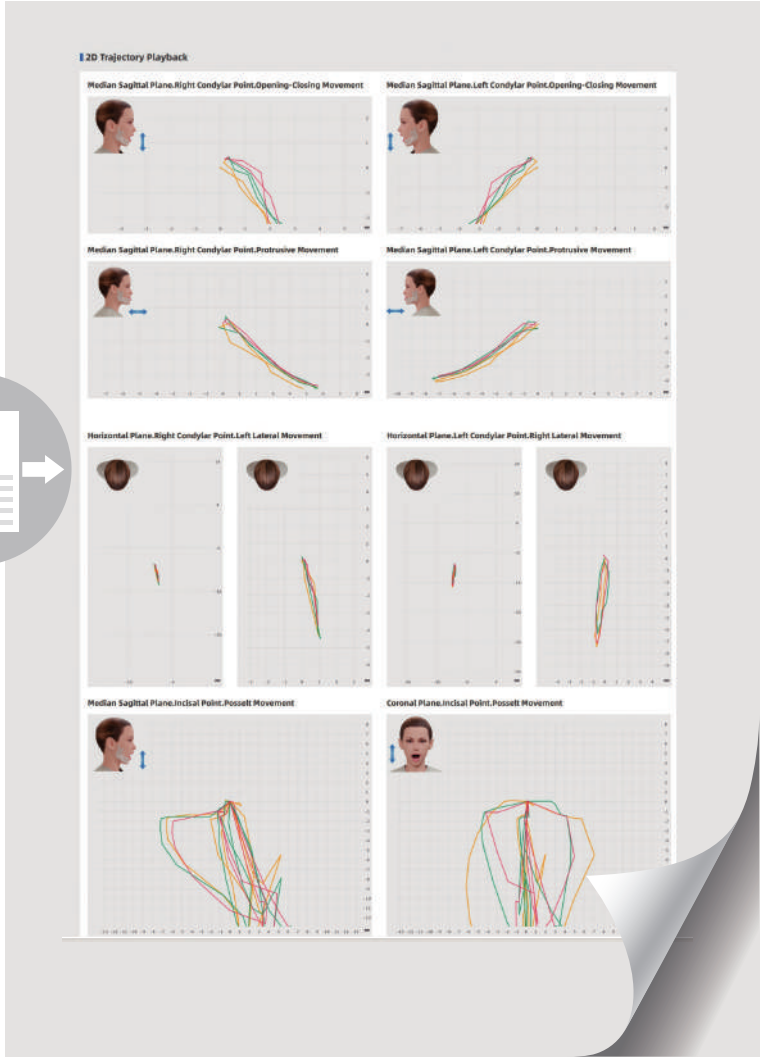


Mandibular Movement Trajectory Analysis

This feature offers a comprehensive view of condyle and incisal edge motion in different directions, unlocking the power of real-time 3D visualization with integrated CBCT data.

By projecting these movements onto standard 2D anatomical planes, it enables precise evaluation of movement coordination, occlusal symmetry, and stability. This supports accurate diagnosis and treatment planning for TMD patients.





Optimal Jaw Relation Determination

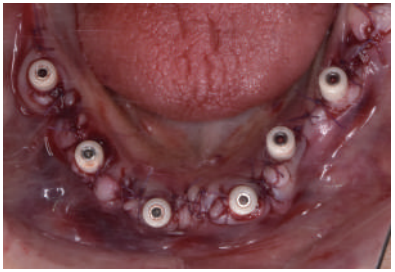
For dentulous patients, it aids in the creation of splints for occlusion rehabilitation, delivering a simpler, smoother, and more efficient workflow. This feature can also be integrated with SHINING 3D's CreSplint software and printers to facilitate seamless and efficient data transfer throughout the process.

NOTE: This module is suitable for the patients without TMD (Temporomandibular Disorder) only.

Optimal Jaw Relation Determination + IPG

A Precise Workflow for Edentulous Implant Cases

In complex edentulous implant restoration cases, acquiring an accurate jaw relation has traditionally been a challenging step. Now, the MetiSmile-MR bridges this gap in the digital restoration process. In addition, with Elite's IPG technology, this revolutionary workflow results in improved occlusion and guarantees passive fitting for dentures.



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> **Treatment Plan:**
> **Upper Jaw:** Transitional Denture
> **Lower Jaw:** Immediate Loading

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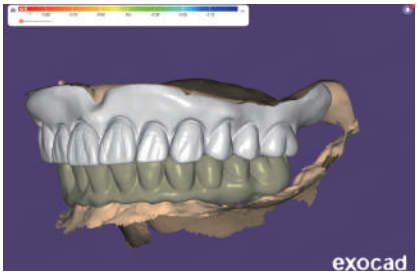
> Standard post-operative intraoral scan, along with an IPG scan of the lower jaw, to confirm the relative positioning of the implants.
> Recording of mandibular trajectories to confirm optimal jaw relationship.



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> Through the design and printing of provisionals, the patient quickly receives aesthetically pleasing and comfortable provisional dentures.

Facial Aesthetic Analysis

Planning

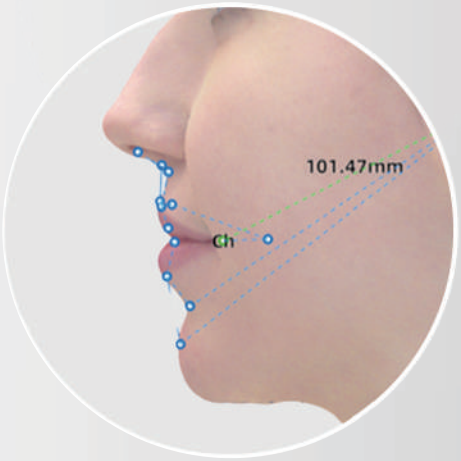
A powerful facial planning tool enables real-time adjustments to facial contours, helping physicians present post-treatment outcomes and create personalized plans that align with patient expectations.

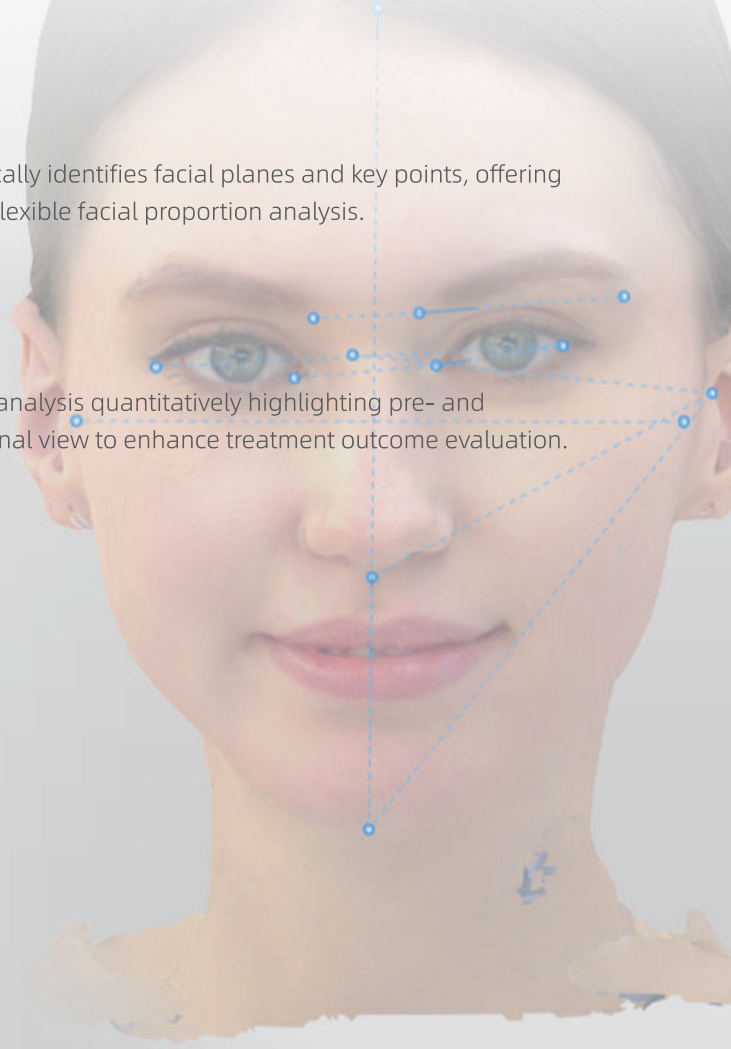
Measurement

An advanced measurement feature that automatically identifies facial planes and key points, offering diverse templates for a more comprehensive and flexible facial proportion analysis.

Comparison

An intuitive comparison tool allows an easy facial analysis quantitatively highlighting pre- and post-treatment changes with a heat map or sectional view to enhance treatment outcome evaluation.



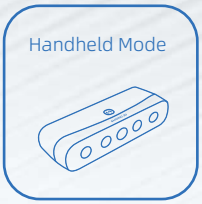


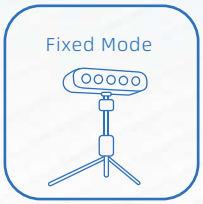
Orthodontic Facial Simulation

The ortho simulation module can simulate changes in both teeth and face during orthodontic treatment, allow patients to preview post-treatment effects. This is extremely helpful for consultations between patients and dentists.

Extraordinary User Experience

- Open system to export STL, OBJ and PLY.
- Seamless data connectivity with other SHINING 3D devices.
- A single device completes facial scanning and mandibular movement recording.
- Light and compact, only 800 grams.

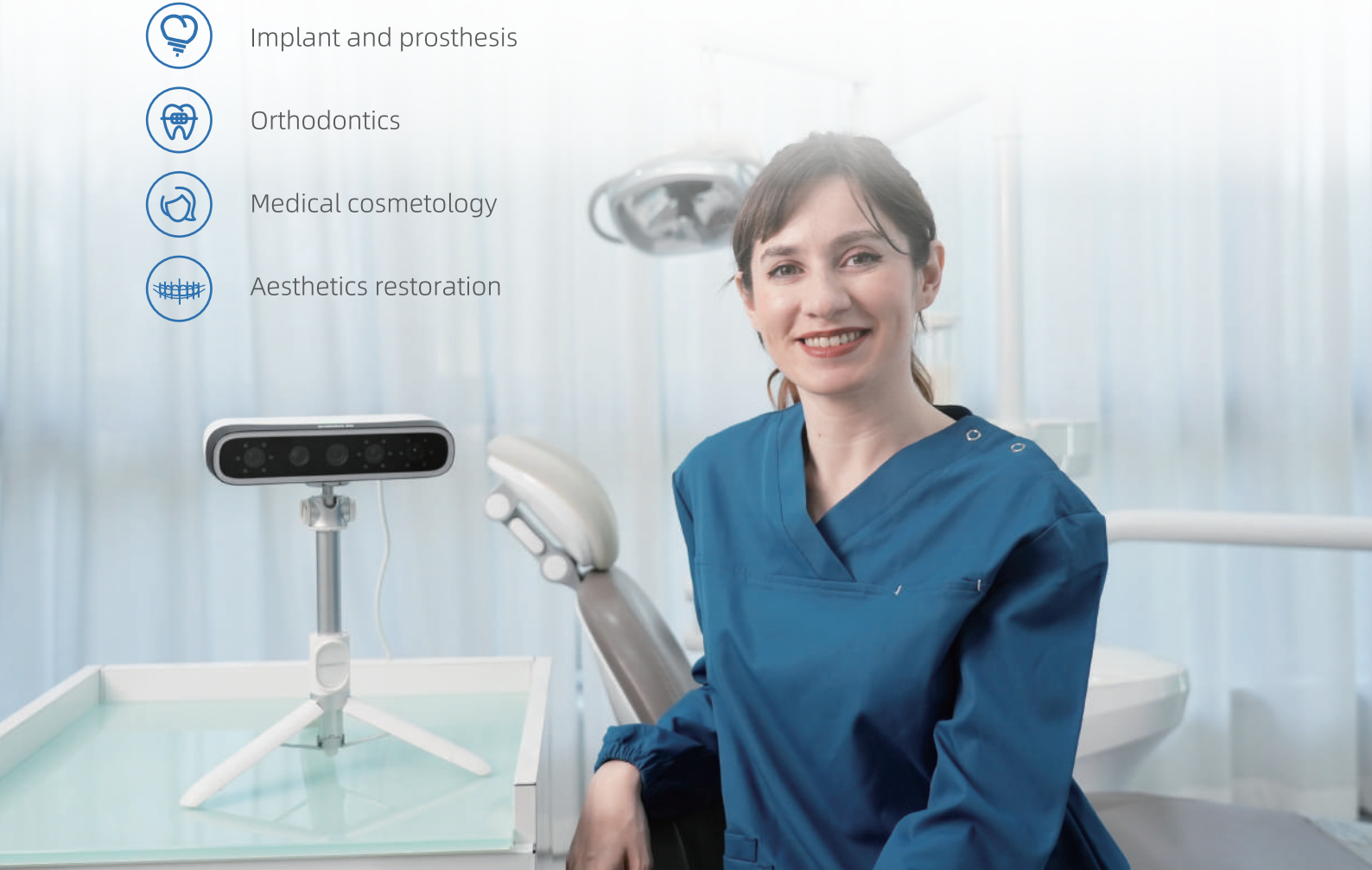




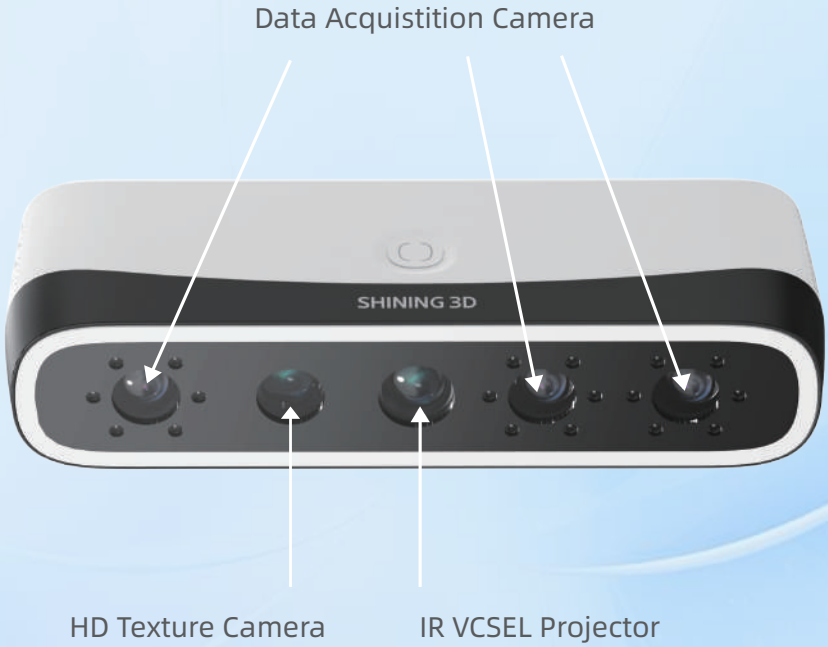
Applications

The powerful and advanced software of the Metismile-MR makes this product an indispensable tool for digital dental treatment, including maxillofacial surgery, implant and prosthesis, orthodontics, medical cosmetology, etc. It will take your clinic to the next level.

- Maxillofacial surgery
- Implant and prosthesis
- Orthodontics
- Medical cosmetology
- Aesthetics restoration



Powerful Hardware



Fast Scan Speed

In just 10 seconds this highly perceptive scanner can take photos of patients from multiple angles to simultaneously construct a 3D facial data.

High Accuracy

Three 1.3 MP data acquistition cameras and one 5.0 MP HD texture camera produce scan accuracy within 50μm. MetiSmile-MR also captures elevated details of the teeth.

High-fidelity Texture

The exceptional texture camera of the MetiSmile-MR can accurately record and display facial color that appears realistic to the patient.

Technical Specifications
MetiSmile-MR

Model	MetiSmile-MR
Resolution	Data Acquisition Camera: 1.3 Mega Pixel HD Texture Camera: 5.0 Mega Pixel
Accuracy	50μm
Field of View	With working distance 500mm, the FOV is 210*270mm
Output Format	PLY, OBJ, STL
White LED color temperature	5500K
Dimension	215*50*75mm
Weight	800g
Power Supply	Input: AC100-220V~, 50/60HZ, 1.5A Output: DC12V, 7.0V

Recommended PC Configuration

CPU	Intel Core i7-8700 or higher
Memory	16GB is the minimum, 32GB is highly recommended.
Hard Disk Drive	256GB SSD or above
Display Resolution	1920*1080, 60Hz or higher
Connection Port	USB 3.0
Graphic Card (GPU)	NVIDIA RTX 2060 6GB or higher
Operating System	Microsoft Windows 10（64-bit）or later versions of Windows operating system

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1102 Embassy Chambers, 3rd Road, Khar West, Mumbai - 400052, India
+91 22 6127 7777 +919930006127 sales@nkpatelandsons.com
www.nkpatelandsons.com @nkpatelandsons /nkpatelandsons