Implant solutions

3M™ True Definition Scanner

Precise implant impressions with incredible speed
You know in advance that it will be as desired

The desired impression – fast. The precise result – predictable.

Compared to the conventional procedure, digital impressioning provides numerous benefits: potential errors are dramatically reduced; fewer repetitions are necessary; digital data sharing with the lab saves additional time and eliminates further sources of errors. For the patient, on the other hand, comfort is enhanced — and that’s not all. The benefits of digital impressioning include a 100% customized solution for your patient, producing functional and aesthetic properties that clearly outshine conventional techniques — at cost not necessarily higher than with standard solutions.
Maximum accuracy – the basis for implant prosthodontics

Only 0.3 per cent deviation.

The unique precision of the 3M™ True Definition Scanner provides the opportunity to make implant impressions with a fully digital procedure. Implants are rigidly fixed in bone, not the periodontium and inaccuracies in the fit of the prosthetic restoration cannot be compensated for.

Accuracy Measurements of Intraoral Scanners*

![Accuracy Measurements of Intraoral Scanners](image)

Study showed 3M True Definition Scanner digital impressions are more accurate – and more consistently accurate – than leading scanners on the market. Source: Data in file.

*Data acquired by van der Meer WJ, et. al. at the Academic Center for Dentistry Amsterdam.

Verifiable accuracy of fit.

Even a microscopic marginal gap can result in bacterial invasion, inflammation and disease. Impressions made with the 3M™ True Definition Scanner virtually eliminate this risk: they are sufficiently precise for even the most demanding cases – especially implant impressions, in which tolerance for inaccuracy is close to zero. Impressions made with the 3M™ True Definition Scanner have already been processed for thousands of cases and have a fitting accuracy rate of 99.7%.*

** 99.7% of restorations manufactured with the aid of a digital impression with the 3M™ True Definition Scanner are successfully seated with no need of rework. Based on the evaluation of all clinical cases by the 3M customer service during the period from March 2012 to September 2013.

99.7% FITTING ACCURACY RATE**

Once the field is prepared, an adept user can scan a full diagnostic arch in as little as 60 seconds.

Convenient handling: thanks to its small, ergonomically shaped handpiece, the 3M™ True Definition Scanner allows for a particularly fast and simple scanning procedure. An adept user can scan a complete jaw in 60 seconds after the scanning area has been prepared.

Integrable into existing practice workflows.

For seamless cooperation with your lab.

Unlike many closed systems, the 3M™ True Definition Scanner offers full flexibility: the lab can work with any CAD/CAM system that accepts STL (Standard Triangulation Language) data. Hence, you can order your implant work at the lab you have always relied on.

Direct data transfer and fast communication with the lab.

An STL data set can be generated from each scan. The dentist and the lab can access the data set simultaneously after the digital data transfer – a process that eliminates any loss of quality and simplifies communication.

It’s not conventional implant impressioning.

Time-consuming, complicated working steps, such as pick-up impressions, are a thing of the past. With a scan body, which is available for most implant systems, the implant position and soft tissue situation can be scanned simply and accurately – the best prerequisite for precise red aesthetics.
Trusted workflows with BIOMET 3i™ and Straumann®.

3M founded the first successful partnerships for accurate digital implant impressions with leading implant manufacturers BIOMET 3i and Straumann. Both sides have conducted a comprehensive technical and clinical validation of the workflow, resulting in seamlessly integrated, well-matched procedures.

Flexibility thanks to freedom of choice

Trusted and open workflows.

The 3M™ True Definition Scanner offers you total flexibility. On the one hand, you have access to trusted workflows – validated workflows that have been developed in cooperation with leading implant manufacturers. On the other hand, you can create open workflows with your existing system components, thanks to the availability of unencrypted STL data.

Trusted workflows – high quality assurance through validated workflows.

3M cooperates with leading manufacturers to seamlessly integrate the digital impression into your implant workflow. Trusted Connections with these partners mean gapless technical and clinical validation plus seamless procedures to ensure quality and performance that meet your high demands. These partnerships offer all advantages of an integrated workflow – without the disadvantages of a closed system. Additional partnerships with dental product manufacturers are constantly being tested and validated for future integration.

Trouble-free cooperation with your familiar dental lab.

Your dental lab is your first validated workflow. For further processing of the scan data, highly precise SLA working models for the lab are available. 3M Margin Marking software, specially developed for the 3M™ True Definition Scanner, provides a unique depiction of the oral anatomy and enables the technician to precisely mark the preparation margin. In addition, it ensures that the accuracy of the scan can be maintained in the on-going process as well.
FAST AND TOTALLY PREDICTABLE: THE MOST CONVENIENT IMPRESSIONING METHOD FOR ME.
**Trusted workflow with BIOMET 3i™**

A perfectly coordinated workflow for the 3M™ True Definition Scanner.

As partners, 3M and BIOMET 3i work well together to enhance your digital implant solution. The BIOMET 3i™ BellaTek™ Encode® system, in combination with the True Definition Scanner, reduces the number of working steps required in implant impression. This saves time and protects the peri-implant tissue. Thanks to the validated workflow, each step leads seamlessly to the next one – from data transfer after the scan, to abutment and model manufacturing, to the creation of the crown by your partner lab.

**Case example: crown on BIOMET 3i implant in region 46.**

**Benefits of the workflow with BIOMET 3i™ and the 3M™ True Definition Scanner:**

- Only one part for gingiva former and scan body means fewer screwing procedures on the implant.
- All-digital solution instead of conventional impression and plaster models.
- Enhanced comfort for the patient.
- Shorter processing times thanks to simultaneous manufacturing of abutment and final restoration.
- Use your regular lab to create final restoration.
**Case example: crown on Straumann implant in region 46.**

**Benefits of the workflow with Straumann® and the 3M™ True Definition Scanner:**

**Efficient, automated digital implant workflow.**

**Highly accurate scans** provide precisely fitting Straumann® CARES® customized abutments and restorations.

**Fewer steps and faster turnaround times** than in traditional workflow.

**Cooperation with existing partner lab is possible** — after inclusion in Straumann CARES network.
Open system enables additional individual workflows

Unlimited freedom of choice.

Unlike closed systems for digital impressions that impose restrictions on you in respect of material, design or manufacturing, the 3M™ True Definition Scanner is open to all systems that accept STL files. Thus, you can decide, flexibly and freely, how you want to work in each case. Dentists and dental labs have the option to access and download the STL data via the 3M™ Connection Centre.

Your platform for the digital workflow: 3M™ Connection Centre

With our data flat rate, you will get:

- **Regular software updates included.** You always work with the latest version.
- **Use of all trusted workflows** — today and in future.
- **Unlimited number of scans** with full cost control.
- **Unlimited data storage.**
- **Compliance with European privacy regulations.**
- **Access to STL data at any time.** Simple data sharing with partners.

Open system enables additional individual workflows

**Unlimited freedom of choice.**

Unlike closed systems for digital impressions that impose restrictions on you in respect of material, design or manufacturing, the 3M™ True Definition Scanner is open to all systems that accept STL files. Thus, you can decide, flexibly and freely, how you want to work in each case. Dentists and dental labs have the option to access and download the STL data via the 3M™ Connection Centre.

Your platform for the digital workflow: 3M™ Connection Centre

With our data flat rate, you will get:

- **Regular software updates included.** You always work with the latest version.
- **Use of all trusted workflows** — today and in future.
- **Unlimited number of scans** with full cost control.
- **Unlimited data storage.**
- **Compliance with European privacy regulations.**
- **Access to STL data at any time.** Simple data sharing with partners.

**Open system enables additional individual workflows**

**Unlimited freedom of choice.**

Unlike closed systems for digital impressions that impose restrictions on you in respect of material, design or manufacturing, the 3M™ True Definition Scanner is open to all systems that accept STL files. Thus, you can decide, flexibly and freely, how you want to work in each case. Dentists and dental labs have the option to access and download the STL data via the 3M™ Connection Centre.

Your platform for the digital workflow: 3M™ Connection Centre

With our data flat rate, you will get:

- **Regular software updates included.** You always work with the latest version.
- **Use of all trusted workflows** — today and in future.
- **Unlimited number of scans** with full cost control.
- **Unlimited data storage.**
- **Compliance with European privacy regulations.**
- **Access to STL data at any time.** Simple data sharing with partners.

Open system enables additional individual workflows

**Unlimited freedom of choice.**

Unlike closed systems for digital impressions that impose restrictions on you in respect of material, design or manufacturing, the 3M™ True Definition Scanner is open to all systems that accept STL files. Thus, you can decide, flexibly and freely, how you want to work in each case. Dentists and dental labs have the option to access and download the STL data via the 3M™ Connection Centre.

Your platform for the digital workflow: 3M™ Connection Centre

With our data flat rate, you will get:

- **Regular software updates included.** You always work with the latest version.
- **Use of all trusted workflows** — today and in future.
- **Unlimited number of scans** with full cost control.
- **Unlimited data storage.**
- **Compliance with European privacy regulations.**
- **Access to STL data at any time.** Simple data sharing with partners.

Open system enables additional individual workflows

**Unlimited freedom of choice.**

Unlike closed systems for digital impressions that impose restrictions on you in respect of material, design or manufacturing, the 3M™ True Definition Scanner is open to all systems that accept STL files. Thus, you can decide, flexibly and freely, how you want to work in each case. Dentists and dental labs have the option to access and download the STL data via the 3M™ Connection Centre.

Your platform for the digital workflow: 3M™ Connection Centre

With our data flat rate, you will get:

- **Regular software updates included.** You always work with the latest version.
- **Use of all trusted workflows** — today and in future.
- **Unlimited number of scans** with full cost control.
- **Unlimited data storage.**
- **Compliance with European privacy regulations.**
- **Access to STL data at any time.** Simple data sharing with partners.

Open system enables additional individual workflows

**Unlimited freedom of choice.**

Unlike closed systems for digital impressions that impose restrictions on you in respect of material, design or manufacturing, the 3M™ True Definition Scanner is open to all systems that accept STL files. Thus, you can decide, flexibly and freely, how you want to work in each case. Dentists and dental labs have the option to access and download the STL data via the 3M™ Connection Centre.

Your platform for the digital workflow: 3M™ Connection Centre

With our data flat rate, you will get:

- **Regular software updates included.** You always work with the latest version.
- **Use of all trusted workflows** — today and in future.
- **Unlimited number of scans** with full cost control.
- **Unlimited data storage.**
- **Compliance with European privacy regulations.**
- **Access to STL data at any time.** Simple data sharing with partners.

Open system enables additional individual workflows

**Unlimited freedom of choice.**

Unlike closed systems for digital impressions that impose restrictions on you in respect of material, design or manufacturing, the 3M™ True Definition Scanner is open to all systems that accept STL files. Thus, you can decide, flexibly and freely, how you want to work in each case. Dentists and dental labs have the option to access and download the STL data via the 3M™ Connection Centre.

Your platform for the digital workflow: 3M™ Connection Centre

With our data flat rate, you will get:

- **Regular software updates included.** You always work with the latest version.
- **Use of all trusted workflows** — today and in future.
- **Unlimited number of scans** with full cost control.
- **Unlimited data storage.**
- **Compliance with European privacy regulations.**
- **Access to STL data at any time.** Simple data sharing with partners.

Open system enables additional individual workflows

**Unlimited freedom of choice.**

Unlike closed systems for digital impressions that impose restrictions on you in respect of material, design or manufacturing, the 3M™ True Definition Scanner is open to all systems that accept STL files. Thus, you can decide, flexibly and freely, how you want to work in each case. Dentists and dental labs have the option to access and download the STL data via the 3M™ Connection Centre.

Your platform for the digital workflow: 3M™ Connection Centre

With our data flat rate, you will get:

- **Regular software updates included.** You always work with the latest version.
- **Use of all trusted workflows** — today and in future.
- **Unlimited number of scans** with full cost control.
- **Unlimited data storage.**
- **Compliance with European privacy regulations.**
- **Access to STL data at any time.** Simple data sharing with partners.

Open system enables additional individual workflows

**Unlimited freedom of choice.**

Unlike closed systems for digital impressions that impose restrictions on you in respect of material, design or manufacturing, the 3M™ True Definition Scanner is open to all systems that accept STL files. Thus, you can decide, flexibly and freely, how you want to work in each case. Dentists and dental labs have the option to access and download the STL data via the 3M™ Connection Centre.

Your platform for the digital workflow: 3M™ Connection Centre

With our data flat rate, you will get:

- **Regular software updates included.** You always work with the latest version.
- **Use of all trusted workflows** — today and in future.
- **Unlimited number of scans** with full cost control.
- **Unlimited data storage.**
- **Compliance with European privacy regulations.**
- **Access to STL data at any time.** Simple data sharing with partners.
# Technical Specifications

## General Specifications and Classifications

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>View</td>
<td>~10 mm × 13 mm at nominal depth</td>
</tr>
<tr>
<td>Working Depth</td>
<td>0 mm to 17 mm from wand tip</td>
</tr>
<tr>
<td>Video Capture Rate/Flash Rate</td>
<td>20 captures/second (60 images/second)</td>
</tr>
<tr>
<td>Touch Screen Size</td>
<td>546.1 mm (21.5 in.) diagonal</td>
</tr>
<tr>
<td>Dimensions of Cart Base (footprint)</td>
<td>48.77 cm × 73.41 cm (19.2 in. × 28.9 in.)</td>
</tr>
<tr>
<td>System Height (floor to top of bezel)</td>
<td>108.20 cm (42.6 in.)</td>
</tr>
<tr>
<td>Monitor Tilt Adjust</td>
<td>-30° to 45°</td>
</tr>
<tr>
<td>Power Input</td>
<td>100 – 120/200 – 240 V ac, 50/60 Hz, 8 A</td>
</tr>
</tbody>
</table>

## Weights

<table>
<thead>
<tr>
<th>Weight Description</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Shipping Weight</td>
<td>70.8 kg (156 lbs.)</td>
</tr>
<tr>
<td>Cart with Monitor</td>
<td>34 kg (75 lbs.)</td>
</tr>
<tr>
<td>Wand with Cable</td>
<td>233 g (8.2 oz.)</td>
</tr>
</tbody>
</table>

## Wand Dimensions

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Length</td>
<td>254 mm (10 in.)</td>
</tr>
<tr>
<td>Wand Tip Width</td>
<td>16.2 mm (0.64 in.)</td>
</tr>
<tr>
<td>Wand Tip Height</td>
<td>14.4 mm (0.57 in.)</td>
</tr>
<tr>
<td>Maximum Diameter</td>
<td>24.3 mm (0.96 in.)</td>
</tr>
<tr>
<td>Wand Cable Length</td>
<td>2 m (6.6 ft.)</td>
</tr>
<tr>
<td>Calibration</td>
<td>No field calibration required</td>
</tr>
</tbody>
</table>

www.3M.com/TrueDef

3M, ESPE and Lava are trademarks of 3M Company or 3M Deutschland GmbH. Used under license in Canada. All other trademarks are owned by other companies. © 2015, 3M. All rights reserved. XX (0x.2015)