

REVscan™

HANDY ~~3D~~ SCAN™



REV UP YOUR SCANNING  
POWER!

REV™  
SCAN



CATCH THE REVOLUTION IN 3D SCANNING WITH THE REVscan™, PART OF THE HANDYSCAN 3D™ LINE OF SELF-POSITIONING SCANNERS BY CREAFORM.

HERE IS THE REVscan™, THE INNOVATIVE SELF-POSITIONING HANDHELD SCANNER THAT HAS COMPLETELY CHANGED THE WAY REVERSE ENGINEERING, DESIGN, SHAPE ACQUISITION AND 3D INSPECTION ARE DONE. POWERFUL, ACCURATE AND TRULY PORTABLE, THE REVscan DEFINITELY MAINTAINS ITS TECHNOLOGICAL EDGE.

**APPLICATIONS & SOLUTIONS**

**Reverse Engineering & Styling, Design & Analysis:**

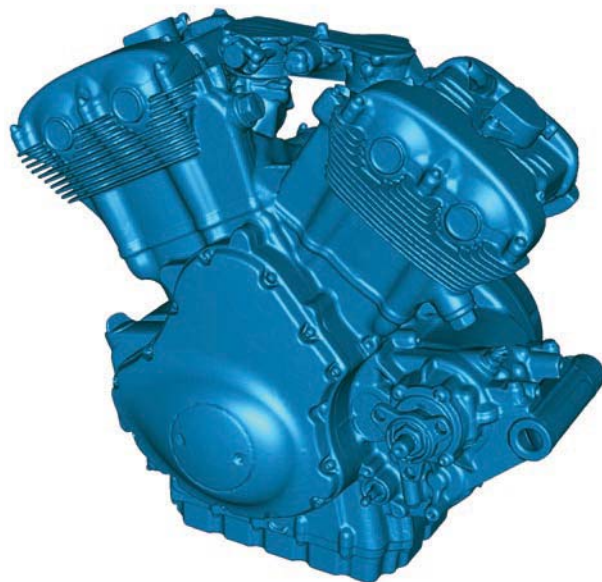
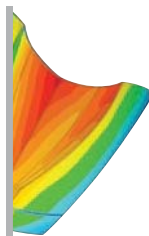
The REVscan laser scanner allows companies to meet their requirements for creating or recreating new designs from existing and sometimes obsolete products or components, or even old parts that may have been developed without the use of CAD. The REVscan has proven particularly efficient at accelerating and facilitating the product design, creation and prototype analysis processes, while reducing related costs.

The REVscan turns out to be very powerful for tasks such as:

- Surface reconstruction
- Class A surfacing
- 3D modeling
- Mechanical design
- Clay model digitizing
- Tooling & jigs development
- Maintenance, repair & overhaul (MRO)
- Finite element analysis (FEA)

**Inspection:**

Scanning and measuring of objects of any size, in various environments. Non contact, first-article and supplier quality inspection, colorimetric reports and overall conformity assessment of parts.



**Medical Applications:**

Non contact, non invasive process. Generation of 3D digital files from body parts or existing objects, orthotics and prosthetics, aesthetics and plastic surgery, body part measurements and reproduction, diagnosis and follow-ups.

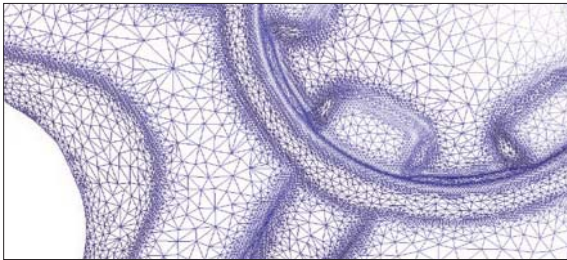


**Other applications** include 3D scanning of existing objects, 3D archiving, complex shape acquisition, measurements archiving, damage assessment, digital models and mock-ups, packaging design and rapid prototyping.

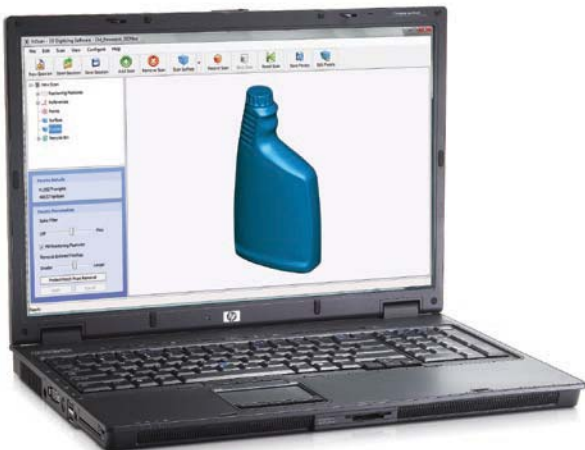


## BENEFITS

- **Self-positioning:** No external tracking or positioning devices are needed. The innovative positioning targets allow the operator to move the object any way he wants, over 360°.
- **Truly portable:** Fits in a case the size of a carry-on, easy to carry on the job site or from plant to plant.
- **High accuracy:** Yields some of the highest data quality available in laser scanning technology.
- **True automatic multiresolution:** The new Decimate Triangles slider makes it possible to keep a higher resolution when needed while keeping larger triangles on flat surfaces, thus producing lighter STL files.



- **Affordable:** Competitively priced, no time-consuming setups and no CMM arm or other external tracking devices are required, very low maintenance device.
- **Handheld device:** The device's shape and weight distribution allows for use on extended periods without leading to musculo-skeletal problems.



- **Versatile and user-friendly:** Allows the scanning of objects of virtually any size, shape or color in confined spaces. Very short learning curve, no extensive training.

## INDUSTRIES

Many industries have welcomed with great interest the introduction of the REVscan laser scanner. This innovative device has proved to be extremely useful and powerful in industries such as **aerospace, automotive, biomechanics, consumer products, education, heritage preservation & architecture** as well as **manufacturing applications**.



Each REVscan comes with VxScan™, Creaform's proprietary data acquisition software that powers the Handyscan 3D laser scanners line-up. This software provides true automatic multiresolution and real time 3D rendering visualization. VxScan is easy to learn and use, and offers powerful options such as enhanced direct .stl generation, surface reconstruction, surface optimization algorithms, improved compatibility (64 bits) and more!

## TECHNICAL SPECIFICATIONS

Weight	980 grams (2.1 lb)
Dimensions	160 x 260 x 210 mm (6.25 x 10.2 x 8.2 in)
Measurements	18,000 measures/s
Laser class	II (eye-safe)
Resolution in Z axis	0,1 mm (0.004 in)
Accuracy	Up to 50 µm (0.002 in)
ISO	20 µm + 0.2 L / 1000
Depth of field	30 cm (12 in)

## COMPATIBLE SOFTWARE

Paired up with the following CAD/post-processing software, the REVscan laser scanner delivers great performance:

- \_ CATIA V5: HSM™, the Handyscan Scanning Module for CATIA V5, is available from Creaform
- \_ Geomagic: The plug-ins for STUDIO and QUALIFY are provided with VxScan
- \_ PolyWorks: Plug-ins are available from Innovmetric for the IMEdit & IMInspect modules
- \_ RapidForm: The Handyscan 3D interface is included with every installation of XOS, XOR and XOV

Other software platforms: please contact our specialists at [info@creaform3d.com](mailto:info@creaform3d.com)



### Included:

Carrying case  
Calibration plate  
Ergonomic support  
FireWire cable  
PCMCIA connecting card  
Power supply  
2,500 positioning targets  
1-year warranty on parts and labour

### Optional Accessories

Laptop computer (Creaform strongly recommends the purchase of its certified computer, as it guarantees the optimum performance of the scanner)  
Target applicator



A BORDERLESS, WORLDWIDE PRESENCE

### Head Office

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MAXscan™

HANDY ~~3D~~ SCAN™



LARGER THAN  
LIFE!

MAX  SCAN™



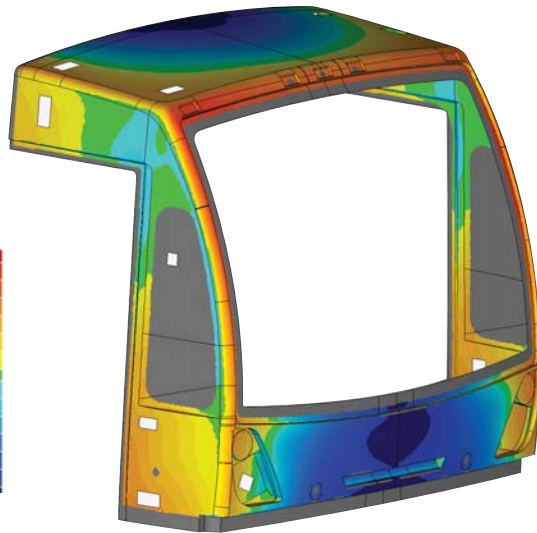
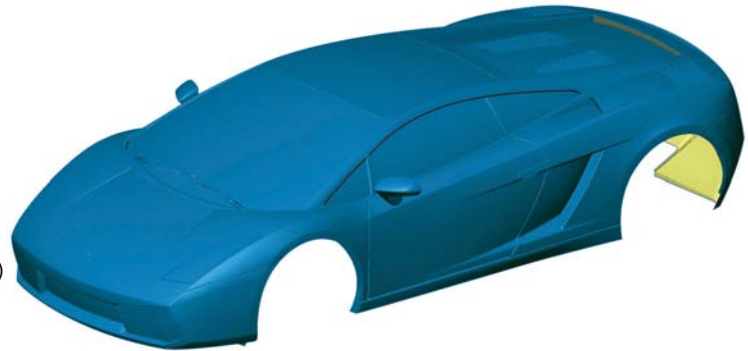
UP TO THIS DAY AND WITH CONVENTIONAL SCANNING TECHNOLOGY, MAINTAINING HIGH ACCURACY WHEN 3D SCANNING LARGE OR VERY LARGE PARTS - SUCH AS FULL-SIZE CARS AND ENTIRE AIRCRAFTS - HAS ALWAYS BEEN A GREAT CHALLENGE. THIS TIME IS NOW OVER. HERE IS THE MAXscan™, THE NEWEST PORTABLE AND HANDHELD LASER SCANNER FEATURING THE HANDYSCAN 3D™ TECHNOLOGY, COMBINED WITH LARGE-SCALE PHOTOGRAMMETRY OPTIMIZATION CAPABILITIES.

**EXTENSIVE LENGTH. LARGE SURFACE. BULKINESS. THESE ARE NO LONGER ISSUES, THANKS TO THE MAXscan. THIS NEW LASER SCANNER HAS BEEN DESIGNED FOR A SOLE PURPOSE : TO BRING LARGE PARTS DATA ACQUISITION TO THE MAXIMUM LEVEL OF ACCURACY EVER REACHED WITH A 2-IN-1 DEVICE. WHEN DEALING WITH LARGE PARTS, THE MAXscan LASER SCANNER IS THE MOST POWERFUL ALLY IN REVERSE ENGINEERING AND INSPECTION.**

**APPLICATIONS & SOLUTIONS**

**\_ Reverse Engineering:**

- Surface reconstruction
- 3D modeling
- Tooling & jigs development
- Maintenance, repair and overhaul (MRO)
- Finite Element Analysis (FEA)



**\_ Inspection:**

- Non contact inspection
- First article inspection
- Supplier quality inspection
- Part-to-CAD inspection
- Conformity assessment of 3D models against the original parts / production tooling
- Conformity assessment of manufactured parts against the originals.

**\_ Other applications** include 3D archiving, complex shape acquisition, measurements archiving, damage assessment, digital models & mock-ups and rapid prototyping.

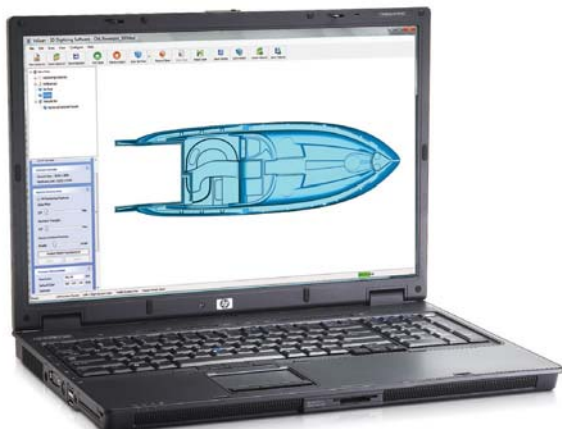


## BENEFITS

- **High accuracy on large parts:** Thanks to built-in photogrammetric capabilities, this scanner offers the highest data accuracy in its class for 3D scanning of large parts. Contrary to measuring arm systems or CMM, the MAXscan's process involves no leapfrog or multiple set-ups, which prevents exponential error accumulation.



- **Limitless working volume:** Facilitates and quickens the measuring process of large parts, as the working volume available with the MAXscan is limitless and configurable, unlike conventional measuring systems that would require several set-ups.
- **Merge-free, one-step process:** All scanning and photogrammetric data are automatically stored and processed into the MAXscan's unique, high accuracy reference model, in one simple step. No external post-alignment required, as the scans are directly acquired in position in the reference model.
- **Truly portable:** Fits in a case the size of a carry-on, easy to carry on the job site, from plant to plant or to exterior locations.
- **MAXimum freedom of movement:** No external tracking or positioning devices are needed. The system's operating mode allows the user to move freely around the part.



- **Self-positioning:** Since the positioning system is affixed to the part itself, fluctuations in the surrounding environment, such as vibrations or wind, have no impact on the data acquisition speed or accuracy.
- **True automatic multiresolution:** The new Decimate Triangles slider makes it possible to keep a higher resolution when needed while keeping larger triangles on flat surfaces, thus producing lighter .STL files.
- **Affordable:** Most affordable 2-in-1 scanning system to generate data of photogrammetry-level accuracy.
- **Handheld device:** The device's shape and weight distribution allows for use on extended periods without leading to musculo-skeletal problems.
- **Versatile and user-friendly:** Allows the scanning of objects of virtually any shape, color or finish in confined spaces. Very short learning curve, no extensive training.



Each MAXscan comes with VxScan™, Creaform's proprietary data acquisition software that powers the Handyscan 3D laser scanners line-up. This software provides true automatic multiresolution and real time 3D rendering visualization. VxScan is easy to learn and use, and offers powerful options such as enhanced direct .stl generation, surface optimization algorithms, improved compatibility (64 bits) and more!



### Build-in photogrammetry functionalities

Software photogrammetry functionalities include photogrammetric processing, control software for post-processing and reporting, automatic on-the-job calibration, automatic referencing, adapter correction and feature measurement.

## TECHNICAL SPECIFICATIONS

Weight	1.27 kg (2.80 lbs)
Dimensions	172 x 260 x 216 mm (6.75 x 10.2 x 8.5 in)
Measurement	18,000 measures/s
Laser Class	II (eye-safe)
Resolution in x, y, z axis	0.1 mm (0.004 in)
Accuracy	Up to 50 µm (0.002 in)
ISO	20 µm + 25 µm/m
Depth of field (scan)	30 cm (12 in)
Output formats	.dae, .fbx, .ma, .obj, .ply, .stl, .txt, .wrl, .x3d, .x3dz, .zpr

## COMPATIBLE SOFTWARE

Paired up with the following software, the MAXscan laser scanner delivers great performance:

- \_ CATIA V5: HSM™, the Handyscan Scanning Module for CATIA V5, is available from Creaform
- \_ Geomagic: The plug-ins for STUDIO and QUALIFY are provided with VxScan
- \_ PolyWorks: Plug-ins are available from Innovmetric for the IMEdit & IMInspect modules
- \_ PRELUDE V5 Inspect: A plug-in is available from Creaform for this software
- \_ RapidForm: The Handyscan 3D interface is included with every installation of XOS, XOR and XOY
- \_ µLog XG, Metrolog XG and Metrolog V5: Plug-in included with µLog XG. For the other 2 software, the plug-in can be purchased from Creaform and metrologic group

Other software platforms: Please contact our specialists at [info@creaform3d.com](mailto:info@creaform3d.com)

### Included:

#### Scanning

Calibration plate  
Ergonomic support  
FireWire cable  
PCMCIA connecting card  
Power supply  
2,500 Handyscan 3D positioning targets

#### Photogrammetry

Magnetic reference cross (1)  
Scale bars, 1340 mm (2)  
150 coded targets on magnetic holder (no 2-150)  
500 uncoded targets

Carrying case, 1-year warranty on parts and labour

### Optional:

Field Pack (for outdoors, in-the-field scanning)

Laptop computer (Creaform strongly recommends the purchase of its certified computer, as it guarantees the scanner's optimum performance)

Magnetic, reusable scanning positioning targets

Target applicator

Etc. (For more optional photogrammetry accessories, contact us)



### Head Office

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# CREAFORM

3D TECHNOLOGY AND DIGITAL SOLUTIONS

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EXAScan™

HANDY3D SCAN™



THE EXACT SCAN,  
EVERY TIME!

EXA™  
SCAN



INTRODUCING THE EXAScan™, THE HIGH RESOLUTION SCANNER FROM THE HANDYSCAN 3D™ LINE OF TRULY PORTABLE, SELF POSITIONING HANDHELD LASER SCANNERS BY CREAFORM.

BASED ON THE SAME BREAKTHROUGH TECHNOLOGY THAT HAS MADE THE HANDYSCAN 3D BRAND SO SUCCESSFUL, THE EXAScan SELF-POSITIONING HANDHELD SCANNER OFFERS INCREASED RESOLUTION AND ACCURACY. THE EXAScan MAKES IT POSSIBLE TO CARRY OUT EXACTING 3D SCANNING PROJECTS WITH A LEVEL OF DETAIL AND ACCURACY THAT NO OTHER HANDHELD SCANNING SYSTEM CAN ACHIEVE. THE EXAScan IS DEFINITELY THE MOST FLEXIBLE, FREEFORM INSPECTION DEVICE ON THE MARKET.

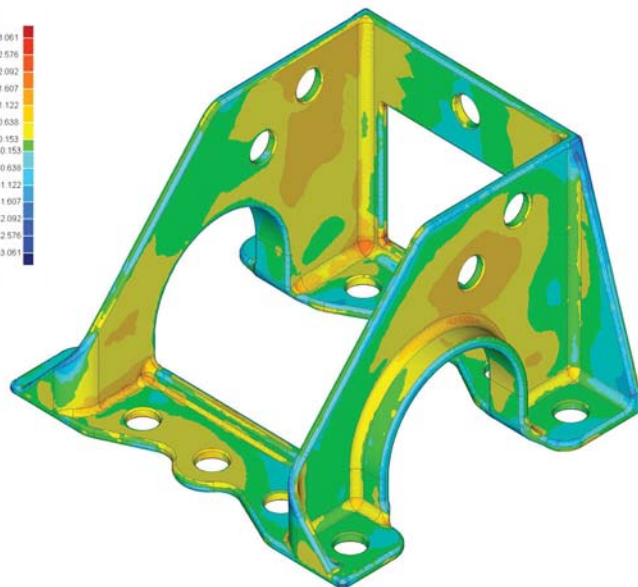
## APPLICATIONS & SOLUTIONS

### \_ Inspection:

The EXAScan laser scanner is the perfect inspection tool for analyzing and reporting geometric dimensioning and tolerancing (GD&T). The direct .stl files generated can easily be imported into inspection software and quickly processed.

The EXAScan can help you with the scanning and measuring of objects of any sizes in various environments, generating inspection and colorimetric reports and:

- Non contact inspection
- First article inspection
- Supplier quality inspection
- Part-to-CAD inspection
- Conformity assessment of 3D models against the original parts/production tooling
- Conformity assessment of manufactured parts against originals.



### \_ Reverse Engineering & Styling, Design & Analysis:

Facilitates surface reconstruction, class A surfacing, 3D modeling, clay model digitizing, mechanical design, tooling & jigs, maintenance, repair & overhaul (MRO) and finite element analysis (FEA).



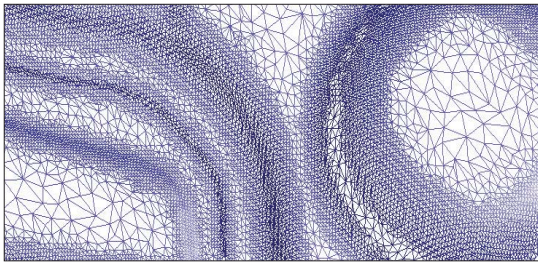
### \_ Other applications:

Include 3D scanning of existing objects, 3D archiving, complex shape acquisition, measurements archiving, damage assessment, medical application, digital models and mock-ups, packaging design and rapid prototyping.

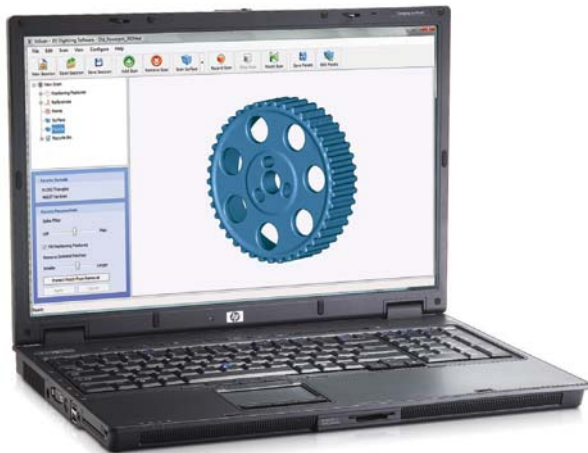


## BENEFITS

- **High resolution:** EXAmines every detail and delivers an incredibly high resolution.
- **Very high accuracy:** Offers unequalled accuracy, for an EXAct 3D representation of the object.
- **True automatic multiresolution:** The new Decimate Triangles slider makes it possible to keep a higher resolution when needed, while keeping larger triangles on flat surfaces, thus producing lighter STL files.
- **Dual scanning mode:** The top-mounted press button enables the operator to switch between normal and high resolution scanning modes. Normal resolution is useful for large parts and time sensitive scans, while high resolution is best for demanding and complex surfaces.



- **Self-positioning:** No external tracking or positioning devices are needed. The innovative positioning targets allow the operator to move the object any way he wants.
- **First truly portable device of its kind:** Fits in a case the size of a carry-on, easy to carry on the job site or from plant to plant; provides ease of use and great flexibility during scan sessions.



- **Affordable:** Competitively priced, no time-consuming setups and no CMM arm or other external tracking devices are required, very low maintenance device.
- **Handheld device:** The device's shape and weight distribution allows for use for extended periods without leading to musculo-skeletal problems.
- **Versatile and user-friendly:** Allows the scanning of objects of virtually any size, shape or color in confined spaces. Very short learning curve, no extensive training.

## INDUSTRIES

There is virtually no limit to what the innovative EXAmin laser scanner can do. By all means, it proves to be extremely useful and powerful in industries such as **aerospace, automotive, biomechanics, consumer products, education, heritage preservation & architecture** as well as **manufacturing applications**.



Each EXAmin comes with VxScan™, Creafom's proprietary data acquisition software that powers the Handyscan 3D laser scanners line-up. This software provides true automatic multiresolution and real time 3D rendering visualization. VxScan is easy to learn and use, and offers powerful options such as enhanced direct .stl generation, surface reconstruction, surface optimization algorithms, improved compatibility (64 bits) and more!

## TECHNICAL SPECIFICATIONS

Weight	1.25 kg (2.75 lb)
Dimensions	172 x 260 x 216 mm (6.75 x 10.2 x 8.5 in)
Measurement	25,000 measures/s
Laser Class	II (eye-safe)
Resolution in x, y, z axis	0,05 mm (0.002 in)
Accuracy	Up to 40 µm (0.0016 in)
ISO	20 µm + 0,1 L /1000
Depth of field	30 cm (12 in)

## COMPATIBLE SOFTWARE

Paired up with the following CAD/post-processing software, the EXAscan laser scanner delivers great performance:

- CATIA V5: HSM™, the Handyscan Scanning Module for CATIA V5, is available from Creaform
- Geomagic: The plug-ins for STUDIO and QUALIFY are provided with VxScan
- PolyWorks: Plug-ins are available from Innovmetric for the IMEdit & IMInspect modules
- PRELUDE V5 Inspect: A plug-in is available from Creaform for this software
- RapidForm: The Handyscan 3D interface is included with every installation of XOS, XOR and XOV

Other software platforms: Please contact our specialists at [info@creaform3d.com](mailto:info@creaform3d.com)



### Included:

Carrying case  
Calibration plate  
Ergonomic support  
FireWire cable  
PCMCIA connecting card  
Power supply  
2,500 positioning targets  
1-year warranty on parts and labour

### Optional:

Laptop computer (Creaform strongly recommends the purchase of its certified computer, as it guarantees the optimum performance of the scanner)  
Target applicator



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### Head Office

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VIUSCAN™

HANDY ~~3D~~ SCAN™



A FULL PALETTE  
OF POSSIBILITIES!

**VIU**  
SCAN™





ONCE AGAIN, **CREAFORM** PUSHES THE LIMITS OF PORTABLE 3D SCANNING WITH THE INTRODUCTION OF THE **VIUscan™**. THIS NEW SELF-POSITIONING SCANNER OPENS THE DOOR TO QUICK, AFFORDABLE AND ACCURATE COLOR SCANNING PROCESSES. **WITH THIS BREAKTHROUGH SCANNER, HANDYSCAN 3D™ DEFINITELY SHIFTS TO 4D!**

**PART OF A WELL-RENOWNED LINE-UP OF ADVANCED 3D SCANNERS, THE VIUscan IS THE ONLY TRULY PORTABLE HANDHELD 3D COLOR SCANNER TO DELIVER SUCH ACCURATE AND HYPERREALISTIC RESULTS.**

**APPLICATIONS & SOLUTIONS**

**Entertainment/Multimedia:**

Face/body still scans for realistic human representation, special effects or face replacement (stunts). Digitizing of real life inanimate objects or environments for optimum realism, production of full size decors through the digitizing of small scale maquettes.



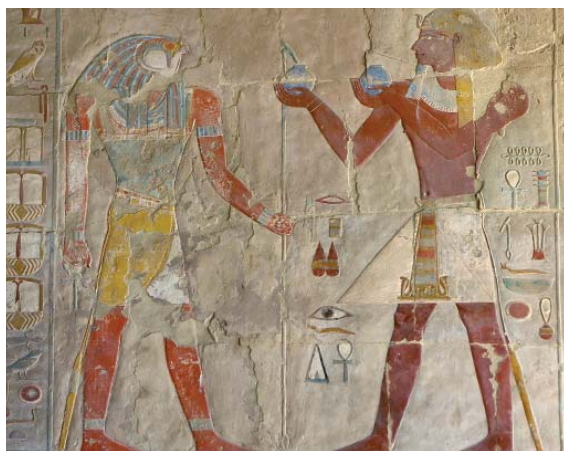
**E-Marketing/Web Development:**

Scanning of objects for interactive 3D content (e.g. product animation or visualization in 3D for online sales), production of 3D models for Web design.



**Museology/Heritage Preservation:**

Representation of art pieces for multimedia presentations, virtual museums (Web, on-site), digital archiving, production of replicas for commercial and marketing purposes (scaled-down version of statues), damage assessment, restoration of cultural heritage (reverse engineering/repairs based on remains), virtual restoration, 3D reproduction of archaeological/historical sites, scanning of fossils for analysis (reconstitution and reconstruction purposes).



**Industrial Design**

Reverse engineering (design from existing color objects), design from scaled down color mock-up, colored or annotated clay models, shape and color part inspection, technical documentation (assembly, maintenance and repair document), 3D collaboration.



**Other applications** include 3D scanning of existing objects, 3D archiving, forensic analysis, artistic and medical applications, complex shape acquisition, measurements archiving, damage assessment, digital models and mock-ups and rapid prototyping.

## FEATURES & BENEFITS

- **High resolution and accuracy:** Captures every detail and delivers high resolution and accurate geometry and textures, for an exact representation of the object.
- **Truly portable:** Fits in a case the size of a carry-on suitcase, easy to carry on the job site.
- **Automatic 100% accurate texture mapping:** The texture and geometry of the object are automatically acquired in one and the same reference system and aligned together with 100% accuracy, eliminating the alignment step usually required after scanning.
- **Adjustable and uniform texture resolution:** The output file shows uniform DPI resolution throughout the whole model, from every viewing angle, which is a great feature when scanning strong curvature forms.
- **True color acquisition:** Thanks to the built-in lighting system, the scanner acquires sRGB-calibrated colors, regardless of the ambient light conditions.
- **Optimal file size:** The resolution parameters make it possible to increase/decrease the texture and geometry resolution at will, and independently of one another, so to create files of optimum size and quality.



- **User-friendly and easy to learn:** The scanning process is virtually plug & play! No particular technical skills are required from the user.
- **Versatile:** The device can be used virtually anywhere and under any conditions, since it requires no external reference system, is lightweight and handheld.
- **Self-positioning:** No external tracking or positioning devices are needed. The innovative positioning targets allow the operator to move the object any way he wants.
- **Dual scanning mode:** The top-mounted press button enables the operator to switch between color-textured geometry scanning or geometry scanning only. The latter can be selected to reduce the size of the final file, when color acquisition is not necessary.
- **Affordable system:** Competitively priced, no time-consuming setups, requires very low maintenance.



Each VIUscan comes with VxScan™, Creaform's proprietary data acquisition software that powers the Handyscan 3D laser scanners line-up. This software provides automatic 100% accurate texture mapping and real time 3D rendering visualization and adjustable texture contrast and brightness parameters. VxScan is easy to learn and use, and offers powerful options such as enhanced direct .stl generation, surface reconstruction, surface optimization algorithms, improved compatibility (64 bits) and more!

## TECHNICAL SPECIFICATIONS

Weight	1.3 kg (2.85 lb)
Dimensions	172 x 260 x 216 mm (6.75 x 10.2 x 8.5 in)
Measurements	18,000 measures/s
Laser class	II (eye-safe)
Geometry Resolution	0.1 mm (0.004 in)
Accuracy	Up to 50 µm (0.002 in)
ISO	20 µm + 0.2 L / 1000
Texture Resolution	50 to 250 DPI (user-configurable)
Texture Colors	24 bits, sRGB-calibrated
Depth of field	30 cm (12 in)
Output file formats	<b>Texture</b> .ma, .dae, .obj, .x3dz, .x3d, .zpr, .wrl, .fbx <b>Non Texture</b> .ply, .stl, .txt

## COMPATIBLE SOFTWARE

The VIUscan generates various files formats that are compatible with major CAD/post-processing and animation software such as:

- \_ Geomagic
- \_ Maya
- \_ PolyWorks
- \_ RapidForm
- \_ 3D Studio Max
- \_ 3DVIA

For more information about all the software platforms compatible with the VIUscan, contact our specialists at [info@creaform3d.com](mailto:info@creaform3d.com).

### Included:

- Carrying case
- Calibration plate
- Ergonomic support
- FireWire cable
- PCMCIA connecting card
- Power supply
- 2,500 positioning targets
- 1-year warranty on parts and labour

### Optional Accessories

- Laptop computer (Creaform strongly recommends the purchase of its certified computer, as it guarantees the optimum performance of the scanner)
- Target applicator



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