

CREAFORM™

ACADEMIA

**3D MEASUREMENT SOLUTIONS
DESIGNED FOR THE ACADEMIC WORLD**



CREAFORM

AMETEK®
ULTRA PRECISION TECHNOLOGIES

ARE YOU READY TO TAKE YOUR TEACHING OR RESEARCH TO A WHOLE NEW LEVEL?

Discover **Creaform ACADEMIA™**, a brand-new solution suite for forward-thinking teachers and researchers looking to inspire, collaborate, and push the innovation envelope forward using the latest advancements in 3D measurement technologies.

With this new educational program, Creaform goes beyond delivering didactic tools and provides a complete and collaborative skill-nurturing academic solution. The suite let's you choose from our full line of 3D scanners and portable CMM, free application software, complimentary add-ons as well as useful tools tailored to get you started with industrial 3D measurement solutions.

Start gaining ground with a **Creaform ACADEMIA FREE PACKAGE!**

50

FREE 50-SEATS NETWORK LICENSE



TEACHING

INDUSTRY ADVANCEMENTS WAIT FOR NO ONE—NOT EVEN IN EDUCATION

THE ACADEMIA TEACHING PACKAGE INCLUDES

- 3 units of ACADEMIA professional-grade 3D scanners (other options available)
- 5-year worry-free ACADEMIA Customer Care Plan
- Software suite with our reverse engineering and inspection software module
- Self-training documentation on ACADEMIA 3D scanners

FEATURES YOUR TEACHING CURRICULUM CAN BENEFIT FROM

- Turnkey solution with all the necessary add-ons to enrich your syllabus
- The industry's most affordable professional-grade 3D scanner dedicated to teaching applications
- Software to use 3D scans in real-world engineering workflows
- Portable, fast, and easy-to-use 3D measurement solutions: become an expert in no time!



RESEARCH

ADVANCE YOUR MOST DEMANDING RESEARCH PROJECTS USING 3D MEASUREMENT SOLUTIONS

THE ACADEMIA RESEARCH PACKAGE INCLUDES

- Metrology-grade portable 3D scanner(s) and portable CMM
- 5-year worry-free ACADEMIA Customer Care Plan
- Software suite including our reverse engineering and inspection software

FEATURES TO HELP YOU TOWARDS YOUR NEXT RESEARCH BREAKTHROUGH

- Turnkey solution designed to carry out complex projects
- Complete portfolio of metrology-grade 3D scanners and a portable CMM at a special pricing for researchers
- Portable, fast, and easy-to-use 3D measurement solutions



FREE TEACHING KITS

COMPLEMENTARY DIDACTIC MATERIAL

Ready-to-use material that is in line with today's industry requirements, all of which covers three main themes:

FREE SOFTWARE

CREAFORM ACADEMIA SOFTWARE PACKAGE

Scanning is the first step. Powerful and fully integrated, our complementary 3D application software suite provides the tools you need to tackle any type of conventional or ahead-of-the-curve engineering workflows.

3D SCANNING



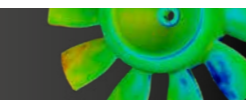
3D MEASUREMENT SOFTWARE PLATFORM VXelements™

REVERSE ENGINEERING



SCAN-TO-CAD SOFTWARE MODULE VXmodel™

INSPECTION



DIMENSIONAL INSPECTION SOFTWARE MODULE VXinspect™

Bring your classes to the next level with Creaform ACADEMIA

- Customizable teaching presentations
- Video tutorials and self learning documentation
- Pre-built lab exercises with sample datasets for real hands-on experience with 3D files

THE ULTIMATE STARTER KIT FOR EASY INTEGRATION INTO ENGINEERING CLASSES



TECHNICAL SPECIFICATIONS

| | ACADEMIA™ | | Go!SCAN 3D™ | HandySCAN 3D™(4) | | MetraSCAN 3D™(4) | |
|--|--|--|--|--------------------------------------|--|---|--|
| | ACADEMIA 10™ | ACADEMIA 50™ | Go!SCAN SPARK™ | HandySCAN 307™ | HandySCAN BLACK™ Elite | MetraSCAN 357™ | MetraSCAN BLACK™ Elite |
| PART SIZE RANGE (recommended) | 0.3–3 m | | 0.1–4 m | 0.1–4 m | 0.05–4 m | 0.2–6 m | |
| ACCURACY | Up to 0.250 mm ⁽²⁾ | Up to 0.1 mm ⁽²⁾ | Up to 0.050 mm ⁽²⁾ | Up to 0.040 mm ⁽²⁾ | 0.025 mm ⁽³⁾ | Up to 0.040 mm ⁽²⁾ | 0.025 mm ⁽³⁾ |
| VOLUMETRIC ACCURACY ⁽⁴⁾ (based on working volume) | 9.1 m ³ | N/A | N/A | N/A | N/A | 0.086 mm | 0.064 mm |
| | 16.6 m ³ | N/A | N/A | N/A | N/A | 0.122 mm | 0.078 mm |
| VOLUMETRIC ACCURACY (based on part size) | 0.500 mm/m ⁽⁵⁾ | 0.300 mm/m ⁽⁵⁾ | 0.050 mm + 0.150 mm/m ⁽⁵⁾ | 0.020 mm + 0.100 mm/m ⁽⁵⁾ | 0.020 mm + 0.040 mm/m ⁽⁵⁾ | N/A | |
| MEASUREMENT RESOLUTION | 0.500 mm | 0.250 mm | 0.100 mm | 0.100 mm | 0.025 mm | 0.100 mm | 0.025 mm |
| MESH RESOLUTION | 0.500 mm | | 0.200 mm | 0.200 mm | 0.100 mm | 0.200 mm | 0.100 mm |
| SCANNING AREA | 380 x 380 mm | | 390 x 390 mm | 275 x 250 mm | 310 x 350 mm | 275 x 250 mm | 310 x 350 mm |
| STAND-OFF DISTANCE | 400 mm | | 400 mm | 300 mm | | 300 mm | |
| DEPTH OF FIELD | 250 mm | | 300 mm | 250 mm | | 200 mm | 250 mm |
| LIGHT SOURCE | White light (LED) | | White light (99 stripes) | 7 red laser crosses | 11 blue laser crosses (+ 1 extra line) | 7 red laser crosses | 15 blue laser crosses (+ 1 extra line) |
| LASER CLASS | N/A | 24 bits | N/A | 2M (eye safe) | | 2M (eye safe) | |
| TEXTURE RESOLUTION | | 50 to 150 DPI | 50 to 200 DPI | N/A | | N/A | |
| POSITIONING METHODS | Geometry and/or targets | Geometry and/or targets and/or texture | Geometry and/or targets and/or texture | Targets | | Targets (optional) | |
| MEASUREMENT RATE | 550,000 measurements/s | | 1,500,000 measurements/s | 480,000 measurements/s | 1,300,000 measurements/s | 480,000 measurements/s | 1,800,000 measurements/s |
| WEIGHT | 0.85 kg | 0.95 kg | 1.25 kg | 0.85 kg | 0.94 kg | Scanner: 1.38 kg C-Track: 5.7 kg | Scanner: 1.49 kg C-Track: 5.7 kg |
| DIMENSIONS (LxWxH) | 96 x 140 x 258 mm | 150 x 171 x 251 mm | 89 x 114 x 346 mm | 77 x 122 x 294 mm | 79 x 142 x 288 mm | Scanner: 289 x 235 x 296 mm C-Track: 1031 x 181 x 148 mm | |
| OPERATING TEMPERATURE RANGE | 5–40°C | | | | | | |
| OPERATING HUMIDITY RANGE (non-condensing) | 10–90% | | | | | | |
| CERTIFICATIONS | EC Compliance (Electromagnetic Compatibility Directive, Low Voltage Directive), compatible with rechargeable batteries (when applicable), IP50, WEEE | | | | | | |

FEATURE COMPARISON

| | ACQUISITION MODULES ⁽⁷⁾ | | | APPLICATION MODULES ⁽⁸⁾ | |
|----------------------------------|------------------------------------|--|--|------------------------------------|------------|
| | VXscan™ / VXprobe™ / VXshot™ | | | VXmodel™ | VXinspect™ |
| MULTIPLE MEASUREMENT MODE | ● | | | | |
| MESH EDITING | | | | ● | |
| ALIGNMENT | ● | | | ● | ● |
| GEOMETRIC ENTITIES | ● | | | ● | ● |
| NURBS SURFACE | | | | ● | |
| TRANSFER-TO-CAD SOFTWARE | | | | ● | |
| CAD IMPORT | | | | ● | ● |
| REPORTING | | | | | ● |

(1) Other models of HandySCAN 3D and MetraSCAN 3D are also available.

(2) Typical value for diameter measurement on a calibrated sphere artefact.

(3) HandySCAN BLACK|Elite and MetraSCAN BLACK|Elite (ISO 17025 accredited): Based on VDI/VDE 2634 part 3 standard. Probing error performance is assessed with diameter measurements on traceable sphere artefacts.

(4) MetraSCAN BLACK|Elite (ISO 17025 accredited): Based on VDI/VDE 2634 part 3 standard. Sphere-spacing error is assessed with traceable length artefacts by measuring these at different locations and orientations within the working volume.
MetraSCAN 357: Value for sphere spacing measurement on calibrated.

(5) With positioning targets or with an object presenting adequate geometry and/or color texture for positioning.

(6) HandySCAN BLACK|Elite (ISO 17025 accredited): Based on VDI/VDE 2634 part 3 standard. Sphere-spacing error is assessed with traceable length artefacts by measuring these at different locations and orientations within the working volume.
HandySCAN 307: Value for spheres spacing measurement on a calibrated length artefact.

(7) Acquisition modules are included with all Creaform technologies.

(8) ACADEMIA versions of VXmodel and VXinspect do not support mesh import. Only available with Creaform technologies.



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