

# CREAFORM™

ACADEMIA

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



WATCH PRODUCT VIDEO

**CREAFORM**

**AMETEK®**  
ULTRA PRECISION TECHNOLOGIES

ASK OUR EXPERT

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

Discover Creafom ACADEMIA™, a 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 educational program, Creafom goes beyond delivering didactic tools and provides a complete and collaborative skill-nurturing academic solution. The suite lets 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 Creafom ACADEMIA!

# 50

FREE 50-SEATS NETWORK LICENSE

## TEACHING

INDUSTRY ADVANCEMENTS WAIT FOR NO ONE—NOT EVEN IN EDUCATION

### THE ACADEMIA TEACHING PACKAGE INCLUDES

- ACADEMIA professional-grade 3D scanner (multi-unit packages available)
- 5-year ACADEMIA Customer Care Plan
- Software suite with our reverse engineering and inspection software modules
- 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 ACADEMIA Customer Care Plan
- Software suite with our reverse engineering and inspection software modules

### 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<sup>(1)</sup>

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

3D SCANNING



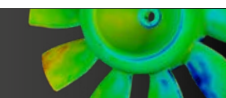
3D MEASUREMENT SOFTWARE PLATFORM  
VXelements™

REVERSE ENGINEERING



SCAN-TO-CAD SOFTWARE MODULE  
VXmodel™

INSPECTION



DIMENSIONAL INSPECTION SOFTWARE MODULE  
VXinspect|Elite™

Bring your classes to the next level with Creafom 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



(1) Creafom ACADEMIA documentation is available in English only.  
(2) With the purchase of a 3D measurement solution from Creafom.

# TECHNICAL SPECIFICATIONS

	ACADEMIA™			GoSCAN 3D™	HandySCAN 3D™ (4)		MetraSCAN 3D™ (4)	
	ACADEMIA 10™	ACADEMIA 50™	ACADEMIA 20™	GoSCAN SPARK™	HandySCAN 307™	HandySCAN BLACK™ Elite	MetraSCAN 357™	MetraSCAN BLACK™ Elite
<b>PART SIZE RANGE</b> (recommended)	0.3–3 m (1–10 ft)		0.05–0.5 m (2–20 in)	0.1–4 m (0.3–13 ft)	0.1–4 m (0.3–13 ft)	0.05–4 m (0.3–13 ft)	0.2–6 m (0.7–20 ft)	
<b>ACCURACY</b>	Up to 0.250 mm (0.01 in) <sup>(2)</sup>	Up to 0.1 mm (0.004 in) <sup>(2)</sup>		Up to 0.050 mm (0.0020 in) <sup>(2)</sup>	Up to 0.040 mm (0.0016 in) <sup>(2)</sup>	0.025 mm (0.0009 in) <sup>(3)</sup>	Up to 0.040 mm (0.0016 in) <sup>(2)</sup>	0.025 mm (0.0009 in) <sup>(3)</sup>
<b>VOLUMETRIC ACCURACY</b> <sup>(4)</sup> (based on working volume)	9.1 m <sup>3</sup> (320 ft <sup>3</sup> ) 16.6 m <sup>3</sup> (586 ft <sup>3</sup> )	N/A	N/A	N/A	N/A	N/A	0.086 mm (0.0034 in)	0.064 mm (0.0025 in)
<b>VOLUMETRIC ACCURACY</b> (based on part size)	0.500 mm/m (0.020 in/ft) <sup>(5)</sup>	0.300 mm/m (0.012 in/ft) <sup>(5)</sup>		0.050 mm + 0.150 mm/m (0.0020 in + 0.0018 in/ft) <sup>(5)</sup>	0.020 mm + 0.100 mm/m (0.0008 in + 0.0012 in/ft) <sup>(6)</sup>	0.020 mm + 0.040 mm/m (0.0008 in + 0.0005 in/ft) <sup>(6)</sup>	N/A	
<b>MEASUREMENT RESOLUTION</b>	0.500 mm (0.020 in)	0.250 mm (0.010 in)	0.100 mm (0.0039 in)	0.100 mm (0.0039 in)	0.100 mm (0.0039 in)	0.025 mm (0.0009 in)	0.100 mm (0.0039 in)	0.025 mm (0.0009 in)
<b>MESH RESOLUTION</b>	0.500 mm (0.020 in)		0.100 mm (0.004 in)	0.200 mm (0.0078 in)	0.200 mm (0.0078 in)	0.100 mm (0.0039 in)	0.200 mm (0.0078 in)	0.100 mm (0.0039 in)
<b>SCANNING AREA</b>	380 x 380 mm (15 x 15 in)		143 x 108 mm (5.6 x 4.3 in)	390 x 390 mm (15.4 x 15.4 in)	275 x 250 mm (10.8 x 9.8 in)	310 x 350 mm (12.2 x 13.8 in)	275 x 250 mm (10.8 x 9.8 in)	310 x 350 mm (12.2 x 13.8 in)
<b>STAND-OFF DISTANCE</b>	400 mm (15.75 in)		380 mm (15 in)	400 mm (15.75 in)	300 mm (11.8 in)		300 mm (11.8 in)	
<b>DEPTH OF FIELD</b>	250 mm (10 in)		100 mm (4 in)	300 mm (11.8 in)	250 mm (9.8 in)		200 mm (7.9 in)	250 mm (9.8 in)
<b>LIGHT SOURCE</b>	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)
<b>LASER CLASS</b>	N/A	24 bits		N/A	2M (eye safe)		2M (eye safe)	
<b>TEXTURE RESOLUTION</b>	50 to 150 DPI		50 to 250 DPI	50 to 200 DPI	N/A		N/A	
<b>POSITIONING METHODS</b>	Geometry and/or targets	Geometry and/or targets and/or texture		Geometry and/or targets and/or texture	Targets		Targets (optional)	
<b>MEASUREMENT RATE</b>	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
<b>WEIGHT</b>	0.85 kg (1.9 lb)	0.95 kg (2.1 lb)		1.25 kg (2.7 lb)	0.85 kg (1.9 lb)	0.94 kg (2.1 lb)	Scanner: 1.38 kg (3.0 lb) C-Track: 5.7 kg (12.5 lb)	Scanner: 1.49 kg (3.28 lb) C-Track: 5.7 kg (12.5 lb)
<b>DIMENSIONS (LxWxH)</b>	96 x 140 x 258 mm (3.8 x 5.5 x 10.2 in)	150 x 171 x 251 mm (5.9 x 6.7 x 9.9 in)	154 x 178 x 235 mm (6 x 7 x 9.2 in)	89 x 114 x 346 mm (3.5 x 4.5 x 13.6 in)	77 x 122 x 294 mm (3 x 4.8 x 11.6 in)	79 x 142 x 288 mm (3.1 x 5.6 x 11.3 in)	Scanner: 289 x 235 x 296 mm (11.4 x 9.3 x 11.7 in) C-Track: 1031 x 181 x 148 mm (40.6 x 7.1 x 5.8 in)	
<b>OPERATING TEMPERATURE RANGE</b>	5–40°C (41–104°F)							
<b>OPERATING HUMIDITY RANGE</b> (non-condensing)	10–90%							
<b>CERTIFICATIONS</b>	EC Compliance (Electromagnetic Compatibility Directive, Low Voltage Directive), compatible with rechargeable batteries (when applicable), IP50, WEEE							

# FEATURE COMPARISON

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

(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.



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