



open technologies

Optical 3D Scanner

OPTICAL 3D SCANNER

i n d u s t r i a l l i n e





croNos3D



croNosDUAL

Cronos3D represents the ultimate goal after years of research and development in the 3d scanning domain. Open Technologies developed its latest industrial scanner in view of an exponentially growing demand for an optical instrument, highly reliable and easy to use that speeds up designing, reverse engineering, testing and cataloguing processes. A compact and light design that makes it the perfect portable industrial digitizer.

Introduced during 2013 Euromold in Frankfurt, **Cronos 3D** has been constantly updated both in hardwares and software, keeping the system in step with the times.

Cronos3D is the affordable, time saving and cost reductive solution for your production stages.

RESOLUTION [MPixels]	FIELD [mm]	WORKING DISTANCE [mm]	POINT SPACING [μm]
3.1 (2048*1536)	150	400	73
	200	450	97
	250	565	122
	300	680	146
	350	790	170
	400	900	195
	450	1015	219
2.0 (1600*1200)	150	400	93
	200	450	125
	250	565	156
	300	680	187
	350	790	218
	400	900	250
	450	1015	281
1.3 (1280*1024)	150	400	117
	200	450	156
	250	565	195
	300	680	234
	350	790	273
	400	900	312
	450	1015	351

GENERAL SPECIFICATIONS

- Sensor standing on a Manfrotto 875B professional Tripod (Stative stand on request)
- CE certification
- Output: .STL, .OBJ, .PLY, .OFF, Curves and section in .iges
- Connectivity: USB3 – HDMI Optical Head, USB rotary table

HARDWARE SPECIFICATIONS

- Light source: LED
- WorkingTemperature: 16 - 28 C°
- Power consumption: 101w
- Weight: 7kg (DUAL) – 5kg (MONO)
- Size: 54 x 25 x 14,5 cm (DUAL)
40 x 25 x 14,5 cm (MONO)

Available configuration on Dual

- 3.1 Mpx: 200 mm - 400 mm / 250 mm - 450 mm
- 2.0 Mpx: 150 mm - 300 mm / 200 mm - 400 mm
- 1.3 Mpx: 200 mm - 400 mm





Stone is the, affordable, vertical solution designed for the Artistic Stone segment, but not only. A well known brand in the segment, **Stone** puts its basis on the technology of its older brother, Cronos3D.

Stone allows to perform digital copies of any model to be reproduced or restored, maintaining the finishing unchanged and keeping the artist's touch. Along with numerical control machineries, it makes possible the realization of your masterpieces, maintaining a never seen before level of detail and accuracy, guaranteeing a proper optimization of the final product value and cost ratio.

Thanks to various partnerships with some of the biggest machineries manufacturers and the indisputable performances of **Stone**, this 3d scanner turned out as Open Technologies' best sale product over, nearly, the past two years.

FEATURES	STONE
Measuring System	STONE 400
Field of View	400 mm
Feature accuracy	± 0.1 mm
Camera Resolution	2 x 1.3 MPixels
Working Distance	115 cm
Weight	5 kg
Scanning Software	Optical Reveng

GENERAL SPECIFICATIONS

- Sensor standing on a Manfrotto 875B professional Tripod (Stative stand on request)
- CE certification
- Output: .STL, .OBJ, .PLY, .OFF, Curves and section in .Iges
- Connectivity: USB2 – HDMI Optical Head, USB rotary table

HARDWARE SPECIFICATIONS

- Light source: LED
- WorkingTemperature: 16 - 28 C°
- Power consumption: 80w
- Weight: 7kg (DUAL)
5kg (MONO)
- Size: 54 x 25 x 14,5 cm (DUAL)
40 x 25 x 14,5 cm (MONO)

Stone has been designed as a mono configuration, 1.3 mega pixels and 400mm measuring volume, it's now available as a Dual, implemented with a second, smaller, field of 200mm.





Insight3 is the latest product from Open Technologies. Based on an infra-red pattern projection, it allows the user to easily acquire a 3d model with complex shapes or to scan a person in a matter of minutes.

According to today's trend, where 3d print hub, mini figures makers, FabLab and customization services are growing on exponential basis, A user friendly, cheap and versatile device was a must for a landmark brand as Open Technologies.

Beside other well established products such as Cronos3D and Aurum3d, Open Technologies is now able to compete on the market with a Real-time solution, and to cover Unexplored Applications.

Design and visual media

Computer graphic for the cinema and gaming industries. Visual effects production studios can take advantage of Insight3 technology, 3d body data can be obtained in few minutes and the 3d "avatar" of actors may be used for animations or for a "safety" management of dangerous stunts.

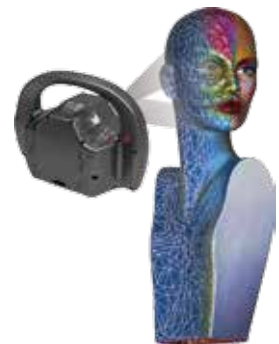
FEATURES	INSIGHT3
Camera	Field of view: $150 < x < 500$ mm
	Point Spacing: $0.12 < x < 0.4$ mm
Camera Resolution	1280 x 1024 Pixels

GENERAL SPECIFICATIONS

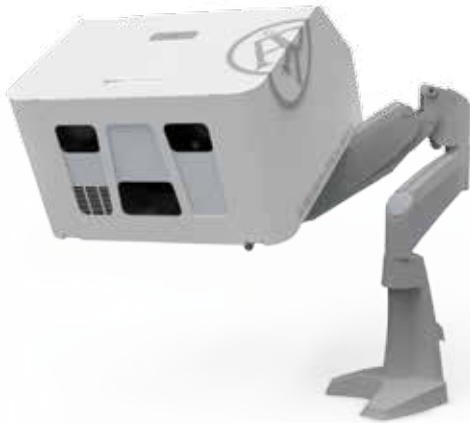
- CE certification
- Output: .STL, .OBJ, .PLY, .OFF, Curves and section in .Iges
- Connectivity: USB2, HDMI Optical Head, USB rotary table

HARDWARE SPECIFICATIONS

- Light source: LED
- WorkingTemperature: 16 - 28 C°
- Power consumption: 25w
- Weight 2,7 kg
- Size: 33 x 24,5 x 17,5 cm



Its use is similar to a video camera, the user grabs the sensor and moves it framing the target. The 3D model is displayed in real time on your monitor while completing your scan.



auRum3D



auRumLT

Open Technologies **Aurum** series is the line of 3d digitizer designed for the jewelry segment. However its performances are highly appreciated anywhere the need is to scan small parts. Tooling or Mini Figures design became major applications as well.

Aurum scanners are well known for their sensitivity to details, they are the ultimate solution for whoever is looking in the domain of 3d scanners for the highest possible result and accuracy.

Both **Aurum 3D** and **Aurum LT** are desktop solutions, scanning process is highly automated, most of the times users efforts are limited to model positioning and a simple mouse click. Alignments are automatic, shapes complexity is no longer an obstacle.

Another State Of the Art equipment, by Open Technologies.

AURUM 3D	FEATURES	AURUM LT
110 x 80 mm	Field of view	110 x 95 mm
2 x 3.1 MPixels	Camera Resolution	2 x 1,31 MPixels
53 µm	Point Spacing	86 µm
4 kg	Weight	10 kg
LED	Light Source	LED
OPTICAL REVENG	Scanning Software	OPTICAL REVENG

GENERAL SPECIFICATIONS

- CE certification
- Output: .STL, .OBJ, .PLY, .OFF, Curves and section in .iges
- Connectivity: USB2, HDMI Optical Head, USB rotary table

HARDWARE SPECIFICATIONS

- Light source: LED
- Working Temperature: 16 - 28 °C
- Power supply: 110-220 volt
- Power Consumption: 80w
- Weight: 4kg aurum 3d
10kg aurum lt
- Size: 50 x 29 x 48 cm (LT)
23,5 x 23,5 x 14 cm (3D)



OPTICAL **REVENG24** SOFTWARE FEATURES

OpenTechnologies' Optical Reveng:

- Automatic Alignments: Features based, Targets, 3 Points, Turning table axis alignment
- Photogrammetry based alignment: Constrain your 3d Data in a photogrammetry dataset
- Customized Mesh generation profiles
- Plane Based Alignment

Mesh repair features including:

- Mesh Optimization
- Noise reduction
- Edges sharpening
- Decimation
- Remeshing
- Color propagation
- Defeature
- Manifold
- Hole filling and bridging
- Intersections repair

Outputs:

- Point clouds: .pc/.asc/.xyz/.pts/.npts/.vtx/.e57/.pcd/.pwn
- Meshes: STL Binary and Ascii / PLY Binary and Ascii / OBJ wavefront / OFF Binary and Ascii
- Polylines: .lges of planar sections or Curves

OPEN TECHNOLOGIES' ACCESSORIES

- Rotating manipulator TRM05 e TRM010
- Spray Matting powder
- Targets
- Flight Case
- Stative stand mod. Manfrotto Salon

