SMARTTECH3D
UNIVERSE

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M E T R O L O G Y

SMARTTECH UNIVERSE combines metrologically verified precision, essential for reverse engineering, with realistic texture and color representation necessary for digitalization purposes. This universal 3D scanner is a complete solution enabling easy creation of 3D documentation of any object for such uses as 3D printing or part modification. Light aluminum casing and carbon fiber framework ensure the best security and stability for sensitive optics, maintaining the lightweight of the device. Each device is supplied with a certificate confirming its accuracy what makes this 3D scanner a referential measuring tool for both — technical and natural — science industries.
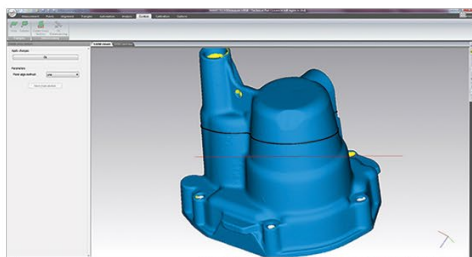

The device fits
in hand luggage size
restrictions for easier handling
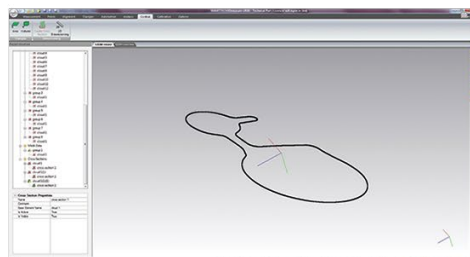
THE NEWEST FUNCTIONS OF SMARTTECH3Dmeasure SOFTWARE

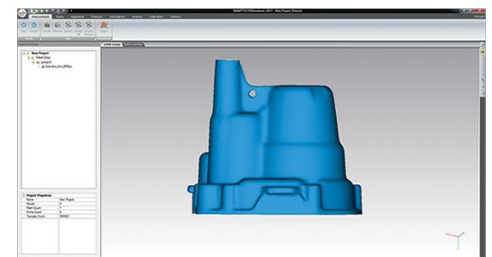**ONE CLICK IS ALL YOU NEED**
Predefined automatization — it takes only one click for the user to obtain closed mesh STL model for 3D printing or OBJ with colorful texture for online publication.

Generated triangle mesh
with cross-section highlighted

Cross-section
for 2D measurement

The ready STL model,
optimized for 3D printing

A DURABLE ALUMINUM CASING WITH A CONSTRUCTION PLATE MADE OF CARBON FIBER

PROFESSIONAL TRIPOD
POSITIONING LASERS
ROTARY STAGE
SHADELESS LIGHTING SYSTEM
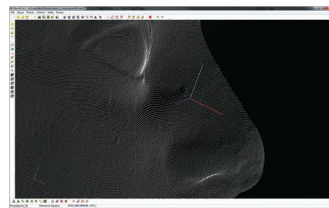

The scanner is equipped with SMARTTECH3Dmeasure — dedicated software allowing smooth processing of millions of measuring points. During the scanning process, the device simultaneously collects information about the shape of the object (X, Y, Z coordinates) and registers realistic texture in each measuring point (RGB colors). High-quality color detectors guarantee precise measurement and accurate imaging of even the smallest details. The software features advanced functions for data post processing and many measurement functions such as point to point, surface, volume or circumference and makes it possible to create PDF reports. Thanks to advanced functions and intelligent algorithms, creating documentation and 3D models has never been so easy and convenient even for non-technical users.
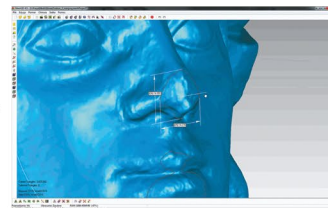
Universal, mobile SMARTTECH3D UNIVERSE scanner combines the precision of geometric measurements with realistic texture mapping. The perfect tool both for modern engineers, archeologists, and scientists.
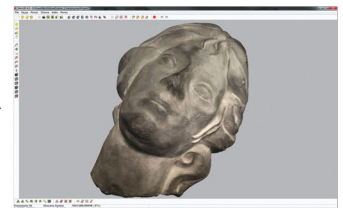

| 3D scanning process | The result of 3D scanning — cloud of points (X, Y, Z with RGB) | Virtual analysis of the object | Virtual museum and online publication of objects |

Technical specifications	2 MP			5 MP			12 MP		
Scanning technology	White structural LED light			White structural LED light			White structural LED light		
Measuring field [mm2]	150x200	200x300	300x400	150x200	200x300	300x400	150x200	200x300	300x400
Measuring depth [mm]	120	210	240	120	210	240	120	210	240
Distance between points [mm]	0,122	0,183	0,244	0,078	0,117	0,156	0,050	0,075	0,100
Sampling [pts/mm²]	67	30	17	164	73	41	400	178	100
Accuracy [μm]	50	60	80	50	60	80	50	60	80

The basic version of SMARTTECH3D UNIVERSE Lite 1,4 MP is available at the net price of 9 900 EUR. The set contains:

- scanning head — shape measuring (without texture)
- tripod and transport case
- manual rotary stage with a set of markers
- calibration matrix
- SMARTTECH3Dmeasure software

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