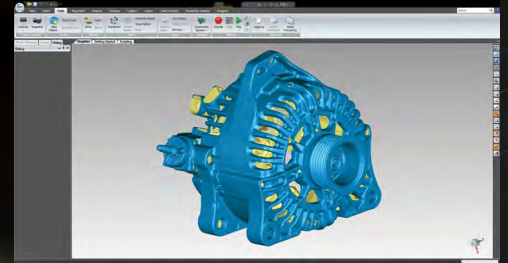
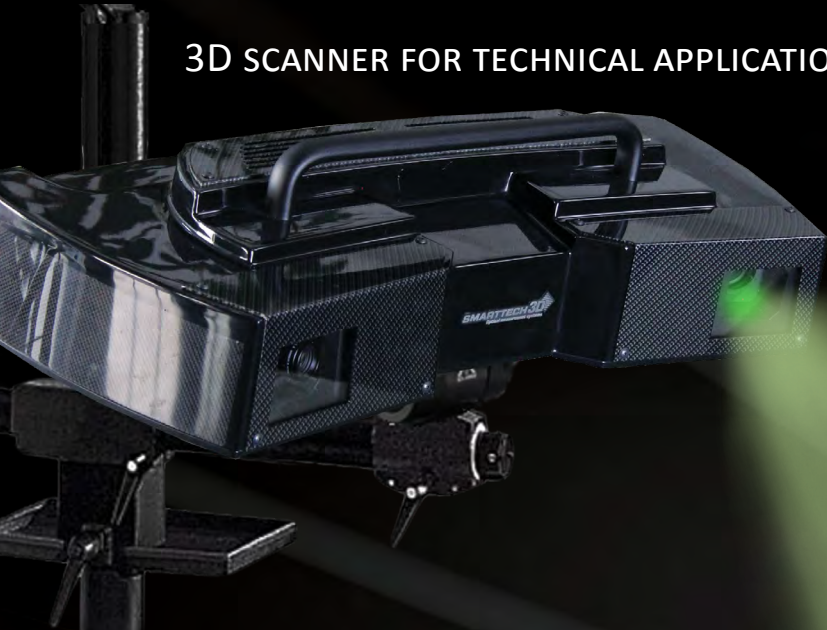


# MICRON3D

*green 10Mpix*

3D SCANNER FOR TECHNICAL APPLICATIONS

Measurement accuracy enhanced by 30% coupled with endurance of carbon fiber construction ready to work in wide temperature range.



Gold Medal  
CONTROL-TECH FAIRS 2014



Modern carbon fiber cover



Dustproof system  
with industrial filter

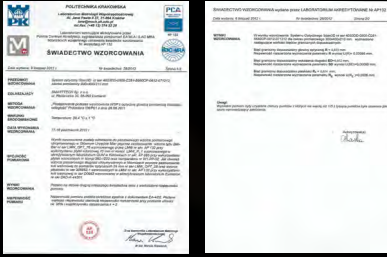
**GREEN LED light**  
technology



Development and refining of MICRON3D took over two years, which allowed us to work over each detail of this hi-end 3D scanner. Our experts and designers based on a questionnaire among scanner users elaborated basic requirements for new generation of the 3D scanner. As an outcome: the new technology of a optical 3D scanner with narrow band green structural light has been launched.

MICRON3D is the high class optical 3D scanner dedicated to 3D scanning of difficult and complex shaped objects. The system is created to increase efficiency of 3D scanning on any production stage. High technical the parameters, closed and compact casing, makes our product fully reliable and mobile measurement device. Using breakthrough technology of narrow-band green LED light not only reduces external lightinflence (as BLUE light), but enhances the accuracy of the scanner by 30%.

Housing and construction of the device have been designed to minimize the impact of external factors during the measurement. Use of modern carbon fiber both increased strength of construction and minimized the influence of temperature fluctuation on scanners accuracy. Additionally implemented internal shock absorbing system and changeable dust proof filters protect the sensitive interior of the 3D scanner.



As the professional and referential measurement device, accuracy of MICRON3D is checked according to VDI/VDE 2634 part 2 standard. Manufacturer certificate of accuracy given to each device assures the quality of the product. Thanks to rigid construction: 3D scanner can be also certified by independent accredited metrology laboratory and this way easily fit into customers quality ensuring systems.

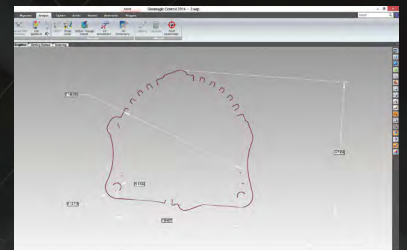
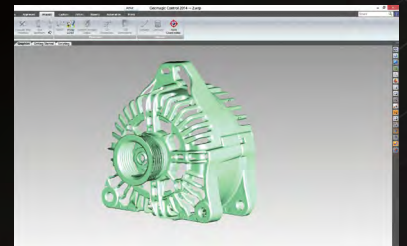
## Secret of green LED light technology

The secret of green light is connected to its mid wavelength, comparing to different components of white light. Thanks to this position it is the best length for recalibration and testing of most optical devices. This means that one can be sure that with green light technology we get the best performance we can achieve. Through wide testing procedures and field measurements, SMARTTECH found that the difference in accuracy of optical scanner can be this way increased by up to 30%.

Now, this knowledge works for your extreme precise measurement.

MICRON3D is the complex solution for advanced 3D scanning application. The highest scanning resolution (10 Mpix) and density of surface probing (to 330 points/mm<sup>2</sup>) provides fully detailed results of even most complex objects. The 3D scanner is held on a stable, ball headed, tripod that allows to adjusting the proper scanner position. Additionally installed laser pointers determine placement of measurement volume. Efficient mobile workstation added to the 3D scanner is a equipped with a specialized cloud of point processing and meshing software. This advanced software allows not only fully automatization of scanning process using rotary stage, markers, and three-point merging, but also complex data post processing such as advanced noise reduction and fast texturing.

The 3D scanner is packed in a convenient hard case with wheels and pull-out handle.



Technical specification	5 Mpix				10 Mpix			
	Green LED structured light				Green LED structured light			
Scanning technology								
Measuring field [mm <sup>2</sup> ]	150 x 200	200 x 300	300 x 400	400 x 600	150 x 200	200 x 300	300 x 400	400 x 600
Distance between points [mm]	0,078	0,117	0,156	0,234	0,052	0,078	0,104	0,156
Sampling [points/mm <sup>2</sup> ]	164	73	41	18	369	164	92	41
Accuracy [μm]	13	28	42	56	13	28	42	56



The 3D scanner is equipped with the SMARTTECH3Dmeasure software, which supports 300 million measurement points. During the scanning process, the 3D scanner obtain information about the shape of the object in X, Y, Z coordinates. The software allows to automatic calculation of surface area and perimeter. Thanks to advanced functions and intelligent algorithms - creating documentation and 3D models has never been so easy and convenient.

In addition, the new functionality of changing the „sensor sensitivity“ parameter allows to 3D scan of dark objects.

## Our Clients:



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