

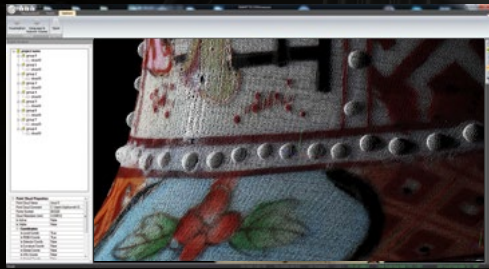
NEW!
3D scanner

SMARTTECH 3D
Optical measurement systems

MICRON3D

color 24Mpix

MICRON3D color is a complex solution for precise digitalization of detailed object with real color capture. It is best tool for documentation and conservation purposes where shape and texture are equally important.



700 points per square millimeter dense point cloud, reflecting the smallest details of geometry and color.

WHITE LED light technology



Growing demands from the archaeological and preservation markets inspired SMARTTECH engineers to develop a brand new solution. New scanner was created for accurate digitalization of colorful objects both in 3D scanning workshop and during real-time excavations.

MICRON3D color is a 3D scanner dedicated to perpetual archivization of colorful historical objects. It is equipped with a detector of the highest resolution available on the market (24 Mpix).

Combining the highest density of points (over 1000 pts/mm²) with 24 bit color capture allows documentation of smallest details of scanned objects such as micro scratches and tool marks.

This high technology, device was designed to be user-friendly and can be operated easily by first time users. Thanks to implemented plug-and-scan launch, scanner doesn't require additional end user calibration and is ready to work directly after taking it out of it's case.

High measurement resolution allows the user to gather information about objects with very complex structures, such as ceramic ornaments, clothes, and oil paintings, which, until now, were very problematic for 3D scanning. The highly sensitive detector enables simple digitization of shiny and dark surfaces alike. Furthermore, full integration with shadeless system makes it possible to capture the scanned object's real color.

All of these features make MICRON 3D the most effective tool for archaeologist, biologist or art restorers. It is also good choice for demanding animations, colorful 3D printing or computer gaming.



Triangle mesh with texture
for colorful 3D printing.



Perfect color visualization thanks to
RGB space suit.

MICRON3D color is the only 3D scanner available on the market with the ability to take high resolution scans with verified measurement values while maintaining the true color of the scanned object.

MICRON3D's carbon fiber housing, replaceable dust-proof filters, and resistance to temperature fluctuations allows the operator to scan on-site at excavations without the risk of damaging the sensitive interior of the device.

A dedicated mobile workstation is provided with the newest version of SMARTTECH 3D measurement software, which enables advanced and automated data post processing such as advanced point of cloud or triangular mesh edition. Both measurement and edition is performed in one software which shortens the learning curve. Due to big amounts of gathered data the environment has been designed for seamless work with data exceeding 200 million points what gives user freedom to choose level of details he works on.

Standard set includes: stable tripod with gimbal mounting head, fully integrated workstation, laser pointers for precise 3D scanner positioning, and hard case for traveling.

The system can be further equipped with fully integrated and automated rotary stages for objects of different sizes and weights and shadeless system for best texture capture. This allows user to shorten the scanning process as well as to further reduce the time needed for data processing.

3D scanning process and virtual research over the object.



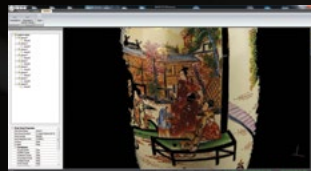
Modern carbon cover



Dustproof system with industrial filter



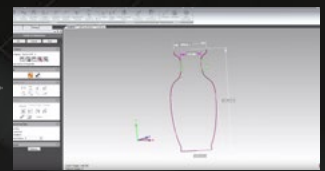
3D measurement with shadeless system.



Result of measurement presented as point cloud (X,Y,Z, RGB).



Automatically created triangle mesh.



Virtual cross-section and dimensioning.

Additional accessories:



Measuring robot



Shadeless system



Automatic rotate stage

| Technical details | 24 Mpix |
|------------------------------|----------------------------|
| Technology | Structural white LED light |
| Detector resolution [points] | 24 Mpix |
| Scanning field [mm²] | 150x200 - 600x800 |
| Distance between points[mm] | 0,03 - 0,13 |
| Sampling rate [points/mm²] | 900 - 56 |
| Accuracy [µm] | 25 - 100 |
| Tripod | + |
| Texture measure | + |
| Mobile work station | + |



Original and copy from 3d printer.



Scan the QR code to see the movie of 3D scanning process with 24Mpix 3D scanner and real texture color of scanned object.

