

## faceSCAN-III PERFECT FOR 3D-PORTRAIT

Our faceSCAN systems are the first choice for 3-dimensionally measuring of human faces very exactly and fast. There are many application areas: scientific and medical purposes and increasing the consumption area.

The faceSCAN-III system is the 3<sup>rd</sup> generation of our successful faceSCAN series. This system was developed for the generation of high resolution 3D data and represents an optimum with regard to price and efficiency. With high resolution 1.4 megapixel cameras the quality of the texture was further increased.

### functional design

- ❑ robust and stable system construction with protected objectives
- ❑ different scanners can be coupled for a rapid 360 degree scan (easy calibration and justification of the sensors)
- ❑ the adjustment on different large persons is simply made by swivel of the system
- ❑ low maintenance by use of durable and cheap halogen lamps



faceSCAN-III in action



Wooden head



Milled mask



Flight case with scanner

### high system performance

- ❑ the software is easy to use because of the automatic alignment and the best fit mode
- ❑ the measurement field is approx. 600 x 460 mm
- ❑ the texture and 3D data acquisition is made with 1384 x 1036 pixel
- ❑ the data formats are compatible to all common data output formats (STL, PLY, WRL)
- ❑ in spite of high resolution the time for data acquisition is less then 2 sec.(180° scanner) or 4 seconds (360° scanner – 2 seconds in the fast modus)

## faceSCAN-III PERFECT FOR 3D-PORTRAIT

### Technical Data

#### Per Sensor

Projection unit	Miniaturized projection technique
Light source	100 W halogen
Imaging	High-resolution digital camera, IEEE 1394-Interface
Digitizing	1384 x 1036
Operating distance	approx. 1 m
Acquisition time	0.8 sec / sensor
Measurement field size	600 x 460 mm, 160°
Depth of measuring vol.	400 mm
Point spacing	0.43 mm
Feature accuracy	+/- 200 µm

#### Image processing

Host PC	Laptop Dell Inspiron 6400, Core™2 Duo, 1,66 GHz, 1 GB RAM, IEEE-1394-Interface (FireWire®), fast graphic adapter
Operating system	Windows XP
Measurement software	OPTOCAT for Windows, Module faceSCAN
Data interface	several formats for point clouds and triangular meshes
Number of scan points	up to 1.4 Mio./sensor

#### Options

Software option	Creating of 3D screensaver
Accessories	Motorized stand
	Flight case
	Scan cabin
	Host PC for 180°- and 360°-scanner

All sensors of the faceSCAN-III system use our proven miniaturized projection technique. This allows a very rapid recording of the measured data in only 0.8 seconds per sensor. faceSCAN-III systems are therefore not very sensitive to movements of the person to be measured and allow recording of facial expressions in a more natural state.



STL-data



Milled data (copper)



Detail of a data set



Scan data with colour information

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