

3-D-Camera

The VEW 3-D-Camera allows for the topographic measurement of object surfaces by the projection of structured light.

Owing to the extremely compact overall dimensions of W200 x L220 x H140mm and the extreme opening width > 90° of the lenses, the system is predestined for use in measurement set-ups that are spatially cramped and/ or only allow a small distance to the object of measurement .

At an object distance of 100 cm, the system can achieve a resolution of 0.1 mm for a measuring field with an edge length of 100 cm thanks to the large opening width.

The object distance amounts to a minimum of 20 cm; the maximum distance is 400 cm.

The high-level light output of the integrated projector allows for the rich-in-contrast lighting of a measuring field of 2 x 2m even under problematic conditions.

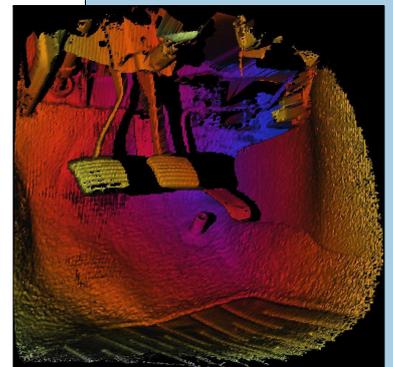
The distortions of the pattern caused by the topography of the object are detected by the CCD camera and scanned by means of software so that calibrated -X, -Y, -Z - coordinates are available for every pixel.

Application example:

3-D measurement of the pedals in the floor room of a motor vehicle.

As an outcome, a point cloud with the X-Y-Z coordinates is available.

A fully automatic calibration unit is available for the system.



Technical specifications:

Warp-resistant aluminium profile housing, dimensions: 200 x 220 x 140mm with tripod support/ quick release adapter

Measuring field diagonal: 200...4000mm

Resolution: Lateral measuring field width ./ 1392 (or 1600) pixels

Depth : measuring field width ./ 10.000

Projector:

12 bit addressable per pixel

1024 x 768 pixel

Interface: DVI

Light source: UHP lamp 160W

Lenses: F 12.5

Camera:

8-bit grey tones

1392 x 1040 pixels

Optional:

1600 x 1200 pixels

Interface: FireWire

The lenses are equipped according to the relevant measurement job.

VEW[®]

DIE ENTWICKLER

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