SPECIFICATIONS

AICON 3D Systems

PrimeScan

R8|C8 — 8.0 Megapixel

System

Camera sensor	s/w or color CCD 1”
Camera resolution	2 x 7.990.272 Pixel (3.264 x 2.448)
Projection unit	Miniaturized Projection Technique
Projection resolution	28.723.200 Pixel (6.144 x 4.675)
Light source	100 W High Power-LED (blue or white)
Minimum measuring time	1 s
Sensor weight	3,8 kg [1]
Power supply	AC 110/230 Volt, 50-60 Hz, external, 150 W
Control unit	Integrated, USB 3.0
Operating system	Windows 7 or Windows 10, 64 Bit

Fields of view

Small Working distance	Triangulation angle: 26 degrees Working distance: 370 mm	
Field of view [mm] [2]	100	500
Field of view size [mm] [3]	90 x 60	375 x 300
Measuring depth [mm] [4]	50	240
X, Y resolution [µm] [5]	27	114
Resolution limit (Z) [µm] [6]	6	26
Feature accuracy [µm] [7]	6	25

Large Working distance	Triangulation angle: 18 degrees Working distance: 540 mm
Field of view [mm] [2]	800
Field of view size [mm] [3]	630 x 500
Measuring depth [mm] [4]	400
X, Y resolution [µm] [5]	191
Resolution limit (Z) [µm] [6]	60
Feature accuracy [µm] [7]	62

Annotation:

All fields of view (FOV) are integral part of the system, their configuration cannot be changed. Each field of view is delivered as separate device.

Please note:

All data and values specified in this data sheet are typical values and apply to a single capture with blue LED and monochrome cameras. Actual values may differ up to 20%, values of systems with color cameras may differ a further 20%. The measurement specifications are average values for the central area of the measuring field which are achieved under predefined measuring conditions and after precise calibration of the sensor. They apply solely in combination with a system configuration provided by AICON 3D Systems. Furthermore, all resolution and accuracy values are dependent on the properties of the object surface as well as the ambient scanning conditions.

(1) Weight may vary depending on the measuring fields.
(2) Each field of view (FOV) is equal to a separate scanner.
3) Lateral expansion (X x Y) in the center of the measuring volume.
(4) Depth of the measuring volume (Z).
(5) The values for the lateral resolution have been calculated theoretically (ratio of the size of the FOV and number of pixels of the camera chip).
(6) The resolution limit is defined as the theoretically achievable resolution.
(7) Characteristic feature accuracy of the type series. The determination of the feature accuracies is based on VDI Guideline 2634 sheet 3.

Subject to change without notice. Version: 07/2016

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