

3D PROFILE SCANNER

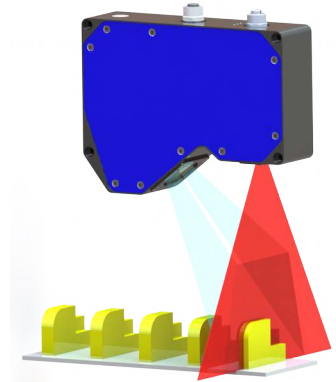
Overview Product Family Laser Triangulation Scanner MH05 to MH880

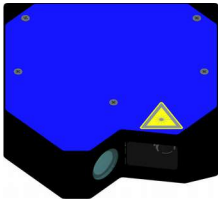
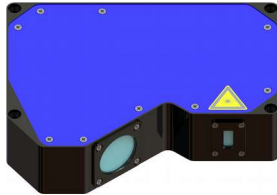



The intelligent laser scanners from the 3D scanner family of ABS are triangulation line scanners adapted to the automated industrial 100% inspection. The portfolio of ABS line scanners extends from 5 mm to 879 mm in height measurement range. These measurement systems allow non-contact measurement or inspection of dimensions, bending angles, clearance, and diameters, as well as determination of position and orientation with 2048 sample points. The scan rate can be increased to 14,000 Hz by using appropriate AOIs. The high dynamic range of the profile scanners allow robust height measurements of optically demanding surfaces in the micrometer range with precise repeatability even in difficult lighting conditions. With the help of an encoder, precise position determination or geometry measurement (HxLxW) is possible. Also distance and position control can be carried out in the sense of an OK / NOK analysis or a subsequent software evaluation.

Fields of Application

- Automated full inspection (100 % inspection)
- Profil measurement, contour recognition, 3D scanning
- Measurement of surfaces, angles, dimensions
- Measurement of coating thickness, position determination
- Quality management, Inline measurement
- Master-slave configuration for multi-scanner operation
- Distance measurement
- Volume measurement
- Machine control



Type	MH05	MH10	MH20	MH30	MH45	MH75	MH240	MH570	MH880
Housing									
Height measurement [mm]	5,0	10,0	20,0	30,0	45,0	75,0	240,0	572,0	879,0
z-Resolution [µm]	0,3	0,6	1,2	1,7	2,6	4,4	13,8	32,6	51,3
x-Resolution [µm]	5,1	7,9	14,0	18,6	26,4	43,5	90,8	212	334
x-Range Min [mm]	9,1	13,8	24,1	34,0	47,0	70,0	153	275	336
x-Range Middle [mm]	10,4	16,1	28,7	38,0	54,0	89,0	186	436	684
x-Range Max [mm]	11,6	18,4	33,2	42,0	62,0	108,0	219	609	1.022
Working distance z Mid [mm]	31,4	38,1	52,5	106	107,5	112,5	529	616	741,5
Distance measuring field [mm]	28,9	33,1	42,5	91,0	85,0	75,0	409,0	330,0	302,0
Triangulation angle [°]	45,0	45,0	45,0	38,0	38,0	38,0	24,0	24,0	24,0
Weight [g]	600	600	600	850	850	850	1.200	1.200	1.200
Dimensions (WxLxH) [mm³]	116 x 113,5 x 36	116 x 113,5 x 36	116 x 113,5 x 36	165 x 123 x 40	165 x 123 x 40	165 x 123 x 40	315 x 110 x 40	315 x 110 x 40	315 x 110 x 40

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