



C6 Series CS Sensors

COMPACT

Sensors

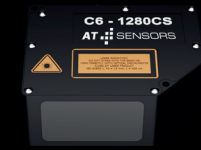
Compact Sensors

- ✓ Factory calibrated 3D sensors
- ✓ Wide range of models with X-FOV 7 - 1290 mm
- ✓ Four different sensor resolutions available (1280, 2040, 3070, 4090)
- ✓ High industrial protection class IP67
- ✓ Available with various laser configurations
- ✓ Resolution Z up to 0.2 μm

Product Overview

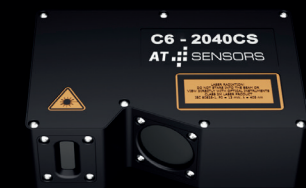
3D Compact Sensor Housing Model G6

- ✓ Profile resolution up to 2048 points / profile
- ✓ Profile speed up to 140 kHz
- ✓ Wide range of models with X-FOV 7 - 53 mm
- ✓ Nominal working distance: 31 - 90 mm
- ✓ Resolution X: 5 - 26 μm
- ✓ Resolution Z: 0.2 - 1.2 μm
- ✓ Z-Range 5 - 46 mm
- ✓ Linearity Z: +/-0.01 % of Z-Range
- ✓ Repeatability Z: 0.1 - 0.5 μm



3D Compact Sensor Housing Model G1

- ✓ Profile resolution up to 2048 points / profile
- ✓ Profile speed up to 140 kHz
- ✓ Wide range of models with X-FOV 29 - 160 mm
- ✓ Nominal working distance: 106 - 197 mm
- ✓ Resolution X: 19 - 78 μm
- ✓ Resolution Z: 0.8 - 5.9 μm
- ✓ Z-Range 40 - 80 mm
- ✓ Linearity Z: +/-0.01 % of Z-Range
- ✓ Repeatability Z: 0.4 - 6.6 μm



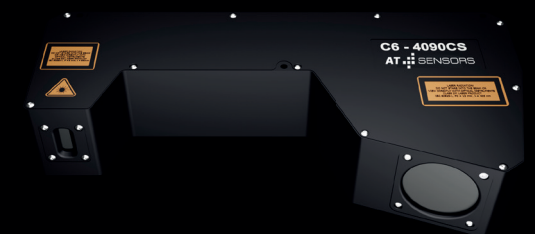
3D Compact Sensor Housing Model G5

- ✓ Profile resolution up to 4096 points / profile
- ✓ Profile speed up to 25 kHz
- ✓ Wide range of models with X-FOV 82 and 145 mm
- ✓ Nominal working distance: 172 mm
- ✓ Resolution X: 20 - 35 μm
- ✓ Resolution Z: 0.5 - 0.9 μm
- ✓ Z-Range 15 mm
- ✓ Linearity Z: +/-0.01 % of Z-Range
- ✓ Repeatability Z: 0.4 - 0.7 μm



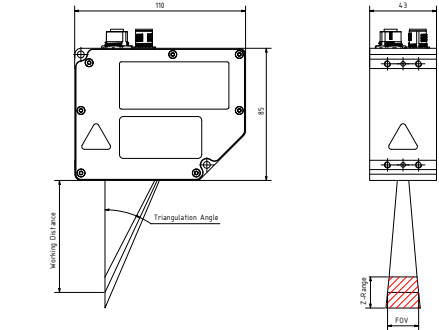
3D Compact Sensor Housing Model G3

- ✓ Profile resolution up to 4096 points / profile
- ✓ Profile speed up to 140 kHz
- ✓ Wide range of models with X-FOV 182 - 1290 mm
- ✓ Nominal working distance: 400 - 944 mm
- ✓ Resolution X: 44 - 586 μm
- ✓ Resolution Z: 1.4 - 35.3 μm
- ✓ Z-Range 250 - 1090 mm
- ✓ Linearity Z: +/-0.01 % of Z-Range
- ✓ Repeatability Z: 2.1 - 10.0 μm



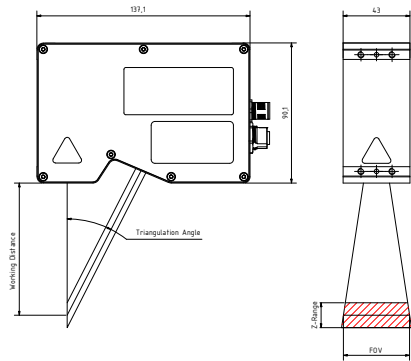
Specifications

Housing Model G6									
Model Name	Nominal X-FOV	Z-Range	Nominal Working Distance	Resolution X (µm)	Resolution Z (µm)	Points per Profile	Profile Speed (kHz)	Laser Wave-length (nm)	Laser Safety Class
C6-1280CS35-7	7 mm (0.27 in)	5.2 mm (0.20 in)	31 mm (1.22 in)	5	0.2	1280	140	405, 450	2M, 3R, 3B
C6-1280CS35-12	12 mm (0.47 in)	8 mm (0.31 in)	31 mm (1.22 in)	10	0.2	1280	140	405, 450	2M, 3R, 3B
C6-1280CS25-20	20 mm (0.78 in)	20 mm (0.78 in)	72 mm (2.83 in)	16	0.5	1280	140	405, 450	2M, 3R, 3B
C6-1280CS21-40	40 mm (1.57 in)	46 mm (1.81 in)	90 mm (3.54 in)	31	1.2	1280	140	405	2M, 3R, 3B
C6-2040CS21-53	53 mm (2.08 in)	46mm (1.81 in)	90 mm (3.54 in)	26	1	2048	25	405	2M, 3R, 3B



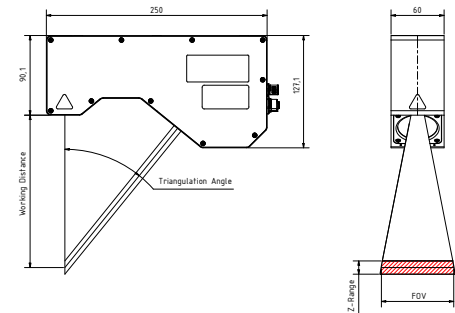
Housing Model G6

Housing Model G1									
Model Name	Nominal X-FOV	Z-Range	Nominal Working Distance	Resolution X (µm)	Resolution Z (µm)	Points per Profile	Profile Speed (kHz)	Laser Wave-length (nm)	Laser Safety Class
C6-1280CS23-29	29 mm (1.14 in)	40 mm (1.57 in)	106 mm (4.17 in)	23	0.8	1280	140	405, 660	2M, 3R, 3B
C6-2040CS23-38	38 mm (1.49 in)	30 mm (1.18 in)	106 mm (4.17 in)	19	0.7	2048	25	405, 660	2M, 3R, 3B
C6-1280CS23-47	47 mm (1.85 in)	40 mm (1.57 in)	106 mm (4.17 in)	37	1.4	1280	140	405, 660	2M, 3R, 3B
C6-2040CS23-63	63 mm (2.48 in)	40 mm (1.57 in)	106 mm (4.17 in)	31	1.2	2048	25	405, 660	2M, 3R, 3B
C6-1280CS23-75	75 mm (2.95 in)	40 mm (1.57 in)	106 mm (4.17 in)	59	2.3	1280	140	405, 660	2M, 3R, 3B
C6-1280CS14-76	76 mm (2.99 in)	80 mm (3.14 in)	197 mm (7.75 in)	59	3.5	1280	140	405, 660	2M, 3R, 3B
C6-2040CS14-100	100 mm (3.93 in)	120 mm (4.72 in)	197 mm (7.75 in)	49	2.9	2048	25	405, 660	2M, 3R, 3B
C6-2040CS23-100	100 mm (3.93 in)	60 mm (2.36 in)	106 mm (4.17 in)	49	1.9	2048	25	405, 660	2M, 3R, 3B
C6-1280CS14-120	120 mm (4.72 in)	120 mm (4.72 in)	197 mm (7.75 in)	94	5.9	1280	140	405, 660	2M, 3R, 3B
C6-2040CS14-160	160 mm (6.29 in)	80 mm (3.14 in)	197 mm (7.75 in)	78	4.9	2048	25	405, 660	2M, 3R, 3B



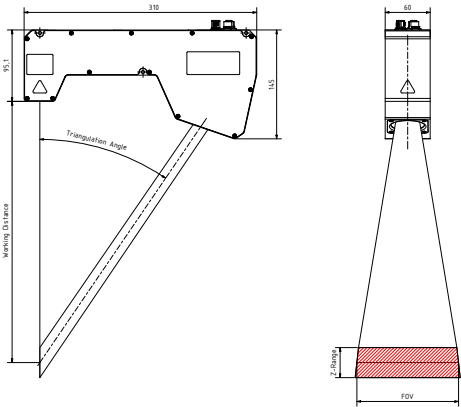
Housing Model G1

Housing Model G5									
Model Name	Nominal X-FOV	Z-Range	Nominal Working Distance	Resolution X (µm)	Resolution Z (µm)	Points per Profile	Profile Speed (kHz)	Laser Wave-length (nm)	Laser Safety Class
C6-4090CS39-82	82 mm (3.22 in)	15 mm (0.59 in)	172 mm (6.77 in)	20	0.5	4096	20	405, 660	2M, 3R, 3B
C6-4090CS39-145	145 mm (5.70 in)	15 mm (0.59 in)	172 mm (6.77 in)	35	0.9	4096	20	405, 660	2M, 3R, 3B



Housing Model G5

Housing Model G3									
Model Name	Nominal X-FOV	Z-Range	Nominal Working Distance	Resolution X (µm)	Resolution Z (µm)	Points per Profile	Profile Speed (kHz)	Laser Wave-length (nm)	Laser Safety Class
C6-4090CS30-182	182 mm (7.16 in)	150 mm (6.25 in)	400 mm (15.74 in)	44	1.4	4096	25	405, 660	2M, 3R, 3B
C6-1280CS30-248	248 mm (9.76 in)	200 mm (7.87 in)	400 mm (15.74 in)	194	6.1	1280	140	405, 660	2M, 3R, 3B
C6-4090CS30-288	288 mm (11.33 in)	250 mm (9.84 in)	400 mm (15.74 in)	70	2.2	4096	25	405, 660	2M, 3R, 3B
C6-2040CS30-330	330 mm (12.99 in)	200 mm (7.87 in)	400 mm (15.74 in)	161	5.0	2048	25	405, 660	2M, 3R, 3B
C6-2040CS18-1060	1060 mm (41.73 in)	800 mm (31.49 in)	744 mm (29.29 in)	518	26.2	2048	25	405, 660	2M, 3R, 3B
C6-2040CS15-1290	1290 mm (50.78 in)	1090 mm (42.91 in)	920 mm (36.22 in)	630	38.0	2048	25	405, 660	2M, 3R, 3B



Housing Model G3

3D Scanner With WARP Speed Thanks to AT's Proprietary Sensor Chip

Fast, faster, fastest: AT Sensors has developed its own sensor chip that makes the AT 3D sensors the fastest in the world in terms of their combination of resolution and speed. The reason for the extremely fast 3D scans is the on-chip processing of the CMOS chip: This recognizes the laser line and compresses it without loss using intelligent algorithms so that only relevant data is transmitted. As a result, the C6 3070 sensor achieves an unmatched 3D profile pixel rate of up to 128 megapixels, which corresponds to 128 million 3D dots per second.

The particular benefit for customers is the profile speed of up to 140 kHz. The so-called WARP speed enables up to ten times higher measurement speeds and therefore ten times faster 3D scans than with conventional sensors, which opens up completely new possibilities for the compact sensor series (CS) from the North German technology company.

The C6 3070 CS sensor also boasts an impressively high resolution of 3,072 profile points. The AT sensors also all work in master-slave mode, allowing synchronized and simultaneous operation of several sensors. And with the help of the „MetrologyPackage“ software, which is included free of charge, several sensors can be calibrated to each other in just a few minutes.



SENSOR MODELS

Four different sensor resolutions available (1280, 2040, 3070, 4090)



LASER

Available with various different laser configurations



RESOLUTION Z

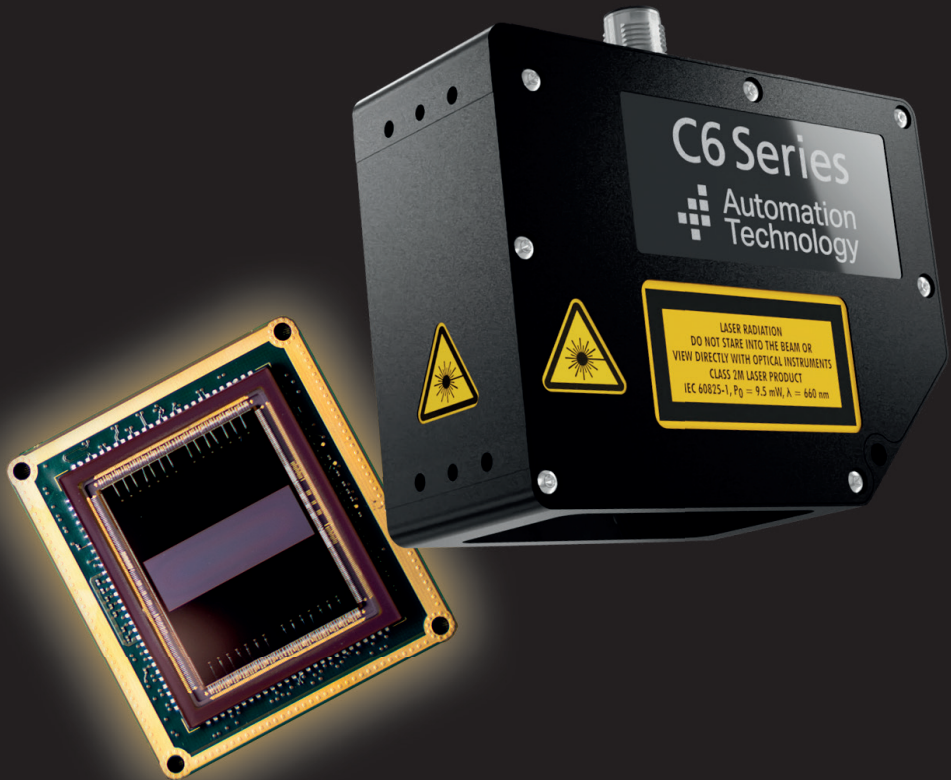
Resolution Z up to 0.2 µm



X - FIELD OF VIEW

Large selection of models with X-FOV 7 - 1290 mm

WORLD'S FASTEST 3D PROFILING





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