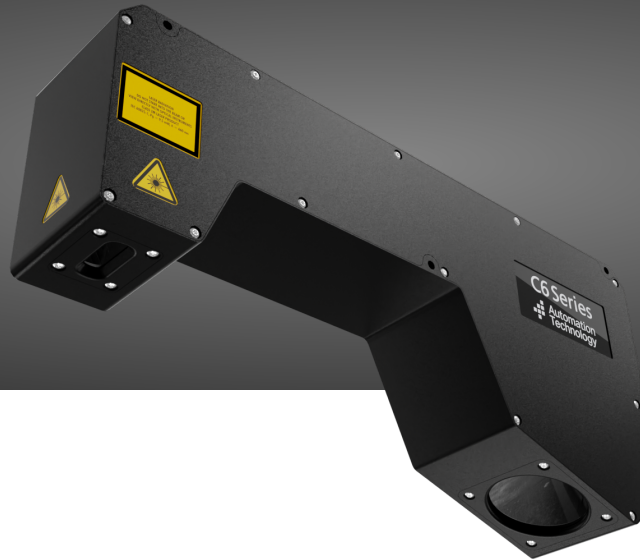


## CS Series DATA SHEET

PN: 202209120, Model: C6-S7-1280-CS-30-248-400-SX-1G-660-3R



The CS sensor series sets new standards in 3D laser triangulation technology with resolutions of up to 4096 pixels, profile frequencies of up to 162 kHz and fields of view of 7 to 1300 mm. These robust sensors with protection class IP67 and M12 connections for a reliable power supply and data transmission are available in various housing sizes. Integration is straightforward and takes place via standard interfaces such as Gigabit Ethernet or GenICam. The CS series thus offers a powerful, maintenance-free solution for OEM customers and end users in demanding industrial environments.

- **Highly standardized, factory-calibrated 3D sensors**
- **Large selection of models with X-FOV 7 - 1290 mm**
- **Four different sensor resolutions available (1280, 2040, 3070, 4090)**
- **High industrial protection class IP67 Available with different laser classes and wavelengths**



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Model Information

|             |                                       |
|-------------|---------------------------------------|
| Model Name  | C6-S7-1280-CS-30-248-400-SX-1G-660-3R |
| Part Number | 202209120                             |

General Data

|                                   |                               |
|-----------------------------------|-------------------------------|
| Points per Profile                | 1280                          |
| Triangulation Angle               | 30 °                          |
| Working Distance                  | 400 mm                        |
| Laser Safety Class                | class3r                       |
| Laser Wavelength                  | 660 nm                        |
| Laser Output Power                | 90 mW                         |
| Laser Line Width                  | -                             |
| Linearity Z-Axis                  | 0.021 % of calibrated Z-Range |
| Profile speed with 200-row region | 9635 Hz                       |
| Maximum profile speed             | 162454 Hz                     |

Field of View

|              | Nominal  | Near Field | Far Field |
|--------------|----------|------------|-----------|
| Scan Width   | 248.9 mm | 203.3 mm   | 339.5 mm  |
| X-Resolution | 194.5 µm | 158.8 µm   | 265.2 µm  |
| Z-Resolution | 4.9 µm   | -          | -         |

Z-Range

|         | Full   | Near Field | Far Field |
|---------|--------|------------|-----------|
| Z-Range | 200 mm | 100 mm     | 100 mm    |

Technical Specifications

|                          |                                                                                                                            |
|--------------------------|----------------------------------------------------------------------------------------------------------------------------|
| Interface                | Gigabit-Ethernet (1GigE)                                                                                                   |
| Inputs                   | Encoder A+, A-, B+, B-, Z+, Z- (TTL level)<br>Two freely configurable digital inputs (+5 to +24 VDC)                       |
| Outputs                  | Two freely configurable digital outputs (+5 to +24 VDC)                                                                    |
| Power Supply             | Sensor supply +10 to +24 VDC (max. +27 VDC )<br>Laser supply +10 to +24 VDC                                                |
| Housing                  | Anodized aluminum<br>IP67 certified                                                                                        |
| Environmental Conditions | Operating temperature: 0 to +40 °C<br>Storage temperature: -20 to +80 °C<br>Relative humidity: 20 to 80 % (non-condensing) |
| Vibration Resistance     | Sinusodial: DIN EN 60068-2-6:2008-10: 2g, 10-150 Hz<br>Random: DIN EN 60068-2-64:2020-09: 7g, 10-500 Hz                    |
| Shock Resistance         | DIN EN 60068-2-27: 2010-02: 15g, 3ms                                                                                       |
| Supported Standards      | GenICam<br>GigEVision                                                                                                      |
| Firmware Features        | RegionTracking, RegionSearch, Multiple Regions, MultiPart, AutoStart, HistoryBuffer, MultiSlope, MultiPeak                 |
| Software                 | SolutionPackage, MetrologyPackage, cxSDK for C, C++, .Net, Python, Matlab, Halcon                                          |

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