MCS Series DATA SHEET

PN: 602345212, Model: C6-S7-4090-MCS-15-1130-820-SX-1G-405-3B

The Modular 3D Compact Sensor (MCS) from AT - Automation Technology is revolutionizing 3D image pro cessing with its unique modularity, flexibility and high performance. This innovative system allows individual configuration in terms of scan width, measurement accuracy, speed, triangulation angle and working distance to perfectly match the needs of specific applications. With an unprecedented profile speed of 200 kHz and a resolution of 4096 points per profile, the MCS sets technological standards. It overcomes traditional hurdles such as high NRE costs and long development times by combining the reliability of a series product with the flexibility of a customized solution, without additional costs or minimum order quantities.

- **Freely configurable, factory-calibrated modular 3D sensors for individual solutions**
- **Five triangulation angles available (15, 20, 25, 30, 40)**
- **Four different sensor resolutions available (1280, 2040, 3070, 4090)**
- **No extra costs, long delivery times or minimum order quantities**
- **Available with different laser classes and wavelengths**

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Model Information

Model Name	C6-S7-4090-MCS-15-1130-820-SX-1G-405-3B
Part Number	602345212

General Data

Points per Profile	4096
Triangulation Angle	15 °
Working Distance	827 mm
Laser Safety Class	class3b
Laser Wavelength	405 nm
Laser Output Power	-
Laser Line Width	-
Linearity Z-Axis	0.029 % of calibrated Z-Range
Profile speed with 200-row region	2092 Hz
Maximum profile speed	24875 Hz

Field of View

	Nominal	Near Field	Far Field
Scan Width	1116.9 mm	922.1 mm	1310.9 mm
X-Resolution	272.7 µm	225.1 µm	320 µm
Z-Resolution	0 µm	-	-

Z-Range

	Full	Near Field	Far Field
Z-Range	299 mm	150 mm	149 mm

Technical Specifications

Interface	Gigabit-Ethernet (1GigE)
Inputs	Encoder A+, A-, B+, B-, Z+, Z- (TTL level) 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) Laser supply +10 to +24 VDC
Housing	Anodized aluminum IP67 certified
Environmental Conditions	Operating temperature: 0 to +40 °C Storage temperature: -20 to +80 °C Relative humidity: 20 to 80 % (non-condensing)
Vibration Resistance	Sinusodial: DIN EN 60068-2-6:2008-10: 2g, 10-150 Hz 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 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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