

ECS-Series DATA SHEET

PN: 602344993, Model: C6-S7-2040-ECS-14-160-197-SX-1G-660-2M



The ECS series (Eco Compact Sensor) represents the latest innovation in 3D sensor technology, character ized by its economy and performance. These sensors are particularly cost-effective, thanks to the use of low er cost optics and sensors and the support of class 2M lasers with a wavelength of 660nm, while offering re liable performance at an affordable price. Designed for standard applications in the food, logistics and robot vision industries where high-end technology is not required, ECS sensors deliver fast and accurate data ac quisition with an output of 2048 points per profile and speeds up to 43 kHz. They offer various field of views and a compact design for easy integration as well as fast software connectivity through GigE-Vision / GenI Cam, making them ideal for cost and efficiency conscious projects.

- Best price-performance ratio: Cost-effective 3D sensor for demanding applications
- · Software standards for easy integrations: GigE Vision, GenICam and third-party software support
- · Cross-industry application area: Ideal for the food industry, logistics and robot vision







Model Information

Model Name	C6-S7-2040-ECS-14-160-197-SX-1G-660-2M
Part Number	602344993

General Data

Points per Profile	2048
Triangulation Angle	14°
Working Distance	197 mm
Laser Safety Class	class2m
Laser Wavelength	660 nm
Laser Output Power	-
Laser Line Width	-
Linearity Z-Axis	0.009 % of calibrated Z-Range
Profile speed with 200-row region	1818 Hz
Maximum profile speed	43478 Hz

Field of View

	Nominal	Near Field	Far Field
Scan Width	162 mm	123.6 mm	204.8 mm
X-Resolution	78 μm	60.4 μm	100 μm
Z-Resolution	4.9 μm	-	-

Z-Range

	Full	Near Field	Far Field
Z-Range	120 mm	60 mm	60 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	GenlCam GigEVision	
Firmware Features	RegionTracking, RegionSearch, Multiple Regions, MultiPart, AutoStart, HistoryBuffer, MultiSlope, MultiPeak	
Software	SolutionPackage, MetrologyPackage, cxSDK for C, C++, .Net, Python, Matlab, Halcon	





