

OC539720 CAMERA SENSORS • CAMERA SENSORS

Camera sensors are used to simultaneously check various properties of objects (e.g., completeness, dimensional accuracy, position, damages, labeling). This takes place independent of the component position virtually in real time. Camera sensors are image processing systems that combine image sensor and image processing computer with image processing software in a metal housing. Depending on the version, lens and illumination unit are also integrated in the housing or must be additionally mounted. The camera sensors are set using an intuitive software program. On the device, object-specific check programs can be stored that contain the respective feature checks. These programs can be activated depending on the object that is to be inspected. The rugged housing design makes possible use under harsh environmental conditions.



MECHANICAL FEATURES

| MECHANICAL FEATURES | |
|---|---------------------------|
| Ambient temperature | 5 °C 50 °C |
| Degree of protection (IP) | IP67 |
| Housing coating | With powder coating |
| Housing material | Aluminum |
| Material of optical surface | PMMA |
| Sensor height | 113 mm |
| Sensor length | 50 mm |
| Sensor width | 53 mm |
| ELECTRICAL FEATURES | |
| Error image memory | 32 |
| For interchangeable lens (C-mount) | + |
| Input voltage at DC | 8 V 30 V |
| Integrated flash controller for external illumination | + |
| Max. output current | 100 mA |
| Measuring time for high speed | 100 fps |
| No-load current | 208 mA |
| Number of digital inputs | 5 |
| Number of digital outputs | 5 |
| Number of pins | 12 |
| Number of pins of the communication interface | 4 |
| Number of switching outputs | 5 |
| Operating voltage | 18 V 30 V |
| Power consumption | 5 W |
| Property picture system | Black and white |
| QR code and barcode identification | + |
| Reverse polarity protection | + |
| Setting procedure | Application software |
| Short-circuit protection | + |
| Type of communication interface | Connector M12 |
| Type of electrical connection | M12-connector |
| Type of plug-in contact, communication interface | Female (socket) |
| Type of switching function | Programmable/configurable |

IPF ELECTRONIC

ELECTRICAL FEATURES

| Type of switching output | PNP |
|--|-----|
| With communication interface, Ethernet | + |
| With communication interface, RS-232 | - |
| With communication interface, RS-485 | - |
| With Ethernet/IP | + |
| With Profinet | - |
| With RS485 | |

OPTICAL FEATURES

| Resolution | 640x480 |
|--|-----------|
| Focal distance | Variable |
| Image recorder | CCD(1/4") |
| Measuring time for high resolution | 50 fps |
| Testing and sorting | + |
| Dimensional accuracy | + |
| Text identification (OCR) | + |
| Pick and place | + |
| Object evaluation regardless of position | + |
| Part location on contours | + |
| Part location on edges | + |
| Part location on circle | + |
| Part location on text line | + |
| Geometry - distance | + |
| Geometry - circle | + |
| Geometry - angle | + |
| Geometry - count edges | + |
| Geometry - point position | + |
| Feature comparison, count contour points | + |
| Feature comparison, contour comparison | + |
| Feature comparison, brightness | + |
| Feature comparison, contrast | + |
| Feature comparison, area size | + |
| Feature comparison, count areas | + |
| Feature comparison, pattern comparison | + |
| Geometry of edge contour | - |

OTHER FEATURES

| Air humidity | 0 90% noncondensing |
|--|---------------------|
| Shock resistance in acc. with EN 60068-2-27 | + |
| Vibration resistance in acc. with IEC 60068-2-6 / IEC 60068-2-64 | + |

Other

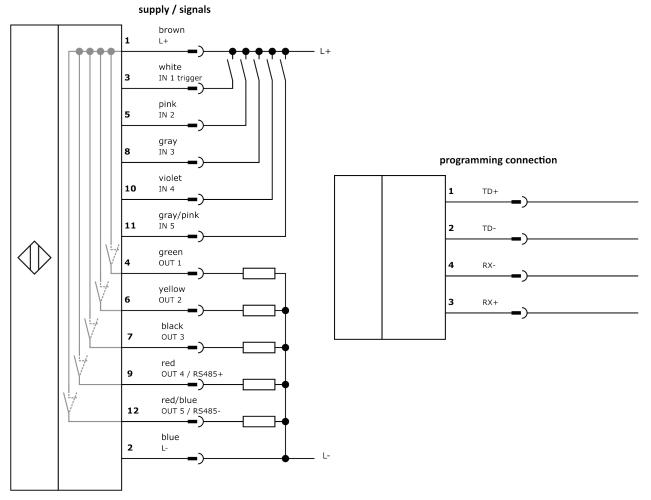
| Packaging dimensions | 140mm x 150mm x 200mm |
|----------------------|-----------------------|
| Shipping weight | 0.34kg |
| Tariff code | 90314990 |



Classification

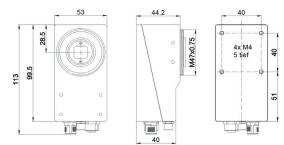
| classification | |
|-------------------|----------|
| ipf product group | 715 |
| eClass 8.0 | 27310201 |
| eClass 9.0 | 27310201 |
| eClass 9.1 | 27310201 |
| ETIM-5.0 | EC001511 |
| ETIM-6.0 | EC001511 |
| ETIM-7.0 | EC001511 |
| | |

Connection



IPF ELECTRONIC

Dimensional drawing



Installation



Mounting / installation may only be carried out by a qualified electrician!



Disposal

Software

Please download the software or driver required for operating your new device on our homepage: www.ipf.de

Safety warnings

Before initial operation, please make sure to follow all safety instructions that may be provided in the product information. Never use these devices in applications where the safety of a person depends on their functionality. LED lighting systems can generate intensive UV radiation, which can damage your eyes in case of improper use. The manufacturer cannot be held responsible for damages that result from improper use or connection.