

OC539820

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

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

Error image memory 32 Feature comparison, color arrangement + For interchangeable lens (C-mount) + Input voltage at DC 8 V 30 V Integrated flash controller for external illumination + Max. output current 100 mA No-load current 208 mA Number of digital inputs 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 Color QR code and barcode identification - Reverse polarity protection + Short-circuit protection + Short-circuit protection + Type of communication interface Connector M12 Type of electrical connection M12-connector Type of plug-in contact, communication interface Female (socket)	ELECTRICAL FEATURES	
Feature comparison, color determination + For interchangeable lens (C-mount) + Input voltage at DC 8 V 30 V Integrated flash controller for external illumination + Max. output current 100 mA 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 Color 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	Error image memory	32
For interchangeable lens (C-mount)	Feature comparison, color arrangement	+
Input voltage at DC Integrated flash controller for external illumination Max. output current No-load current No-load current Number of digital inputs Sumber of pins Number of pins Number of pins Number of pins of the communication interface Number of switching outputs Soperating voltage Property picture system Color QR code and barcode identification Reverse polarity protection Setting procedure Short-circuit protection Type of communication interface M100 mA 100 mA 120 mA 12	Feature comparison, color determination	+
Integrated flash controller for external illumination + Max. output current 100 mA 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 Color 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	For interchangeable lens (C-mount)	+
Max. output current100 mANo-load current208 mANumber of digital inputs5Number of digital outputs5Number of pins12Number of pins of the communication interface4Number of switching outputs5Operating voltage18 V 30 VPower consumption5 WProperty picture systemColorQR code and barcode identification-Reverse polarity protection+Setting procedureApplication softwareShort-circuit protection+Type of communication interfaceConnector M12Type of electrical connectionM12-connector	Input voltage at DC	8 V 30 V
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Number of pins12Number of pins of the communication interface4Number of switching outputs5Operating voltage18 V 30 VPower consumption5 WProperty picture systemColorQR code and barcode identification-Reverse polarity protection+Setting procedureApplication softwareShort-circuit protection+Type of communication interfaceConnector M12Type of electrical connectionM12-connector	Number of digital inputs	5
Number of pins of the communication interface Number of switching outputs Operating voltage 18 V 30 V Power consumption Froperty picture system Color QR code and barcode identification Reverse polarity protection Reverse polarity protection Setting procedure Application software Short-circuit protection Type of communication interface Connector M12 Type of electrical connection 4	Number of digital outputs	5
Number of switching outputs Operating voltage 18 V 30 V Power consumption 5 W Property picture system Color QR code and barcode identification	Number of pins	12
Operating voltage 18 V 30 V Power consumption 5 W Property picture system Color 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	Number of pins of the communication interface	4
Power consumption 5 W Property picture system Color 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	Number of switching outputs	5
Property picture system QR code and barcode identification Reverse polarity protection + Setting procedure Short-circuit protection + Type of communication interface Type of electrical connection Color M12 M12-connector	Operating voltage	18 V 30 V
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	Power consumption	5 W
Reverse polarity protection + Setting procedure Application software Short-circuit protection + Type of communication interface Connector M12 Type of electrical connection M12-connector	Property picture system	Color
Setting procedure Short-circuit protection + Type of communication interface Type of electrical connection M12-connector	QR code and barcode identification	F
Short-circuit protection + Type of communication interface Connector M12 Type of electrical connection M12-connector	Reverse polarity protection	+
Type of communication interface Connector M12 Type of electrical connection M12-connector	Setting procedure	Application software
Type of electrical connection M12-connector	Short-circuit protection	+
··	Type of communication interface	Connector M12
Type of plug-in contact, communication interface Female (socket)	Type of electrical connection	M12-connector
	Type of plug-in contact, communication interface	Female (socket)



ELECTRICAL FEATURES

Type of switching function	Programmable/configurable
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	CMOS(1/3")
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	0.56kg
Tariff code	90314990

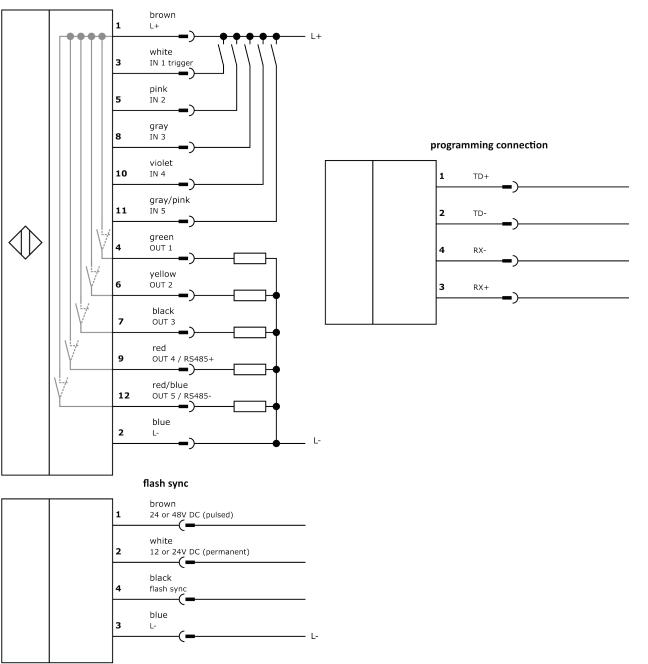


Classification

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

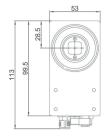
Connection

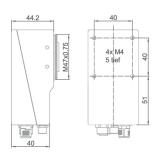
supply / signals





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.