

## OC539421

### Camera systems • Process monitoring

Sensor optical, camera, black/white, 113x38x53mm, 100fps, CMOS(1/3"), 752x480, focal distance 16mm, 5x PNP programmable/configurable, M12-connector 12pin, IP67, aluminum powder-coated+PMMA



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.

#### Electrical features

Number of digital outputs	5
Number of digital inputs	5
Number of switching outputs	5
Type of switching function	Programmable/configurable
Type of electrical connection	Connector M12
Type of switching output	PNP
Rated switching current	100 mA
Property picture system	Black and white
Setting procedure	Application software
Error image memory	32
Short-circuit protection	Yes
No-load current	208 mA
Power consumption	5 VA
Measuring time for high speed	100 fps
Number of pins	12
Reverse polarity protection	Yes
Type of plug-in contact, communication interface	Female (socket)
Type of plug-in connection, communication interface	Connector M12
Number of pins of interface connection	4
Supported communication interface	Ethernet
Operating voltage (DC)	18 - 30 V
ardSOCA_ElektrischerAnschluss	M12 12-pin plug connector
ardSOCA_Betriebsspannung	18-30VDC

### Mechanical features

Width	53 mm
Height	113 mm
Length	38 mm
Surface	With powder coating
Degree of protection (IP)	IP67
Active area material of sensor	Plastic (PMMA)
Housing material	Aluminum
Ambient temperature	5 - 55 °C
ardSOCA_Abmessungen	38x53x113mm

### Optical features

Resolution of image recorder	752x480 px
Image recorder	CMOS(1/3")
Focal distance range	16 mm
Light source	White light
Dimensional accuracy	Yes
Measuring time for high resolution	50 fps
Object evaluation regardless of position	Yes
Pick and place	Yes
Minimum focal distance	70 mm
For geometry	distance   count edges   edge tracking   circle detection   point position determining   angle measurement
For part location	on edges   on contours   at text lines   on circles
For feature comparison	size of area   count surfaces   brightness   compare contours   count contour points   compare pattern   contrast
Risk group	1

### Other features

Relative air humidity (non-condensing)	0 - 90 %
Shock resistance in acc. with EN 60068-2-27	Yes
Vibration resistance in acc. with IEC 60068-2-6 / IEC 60068-2-64	Yes

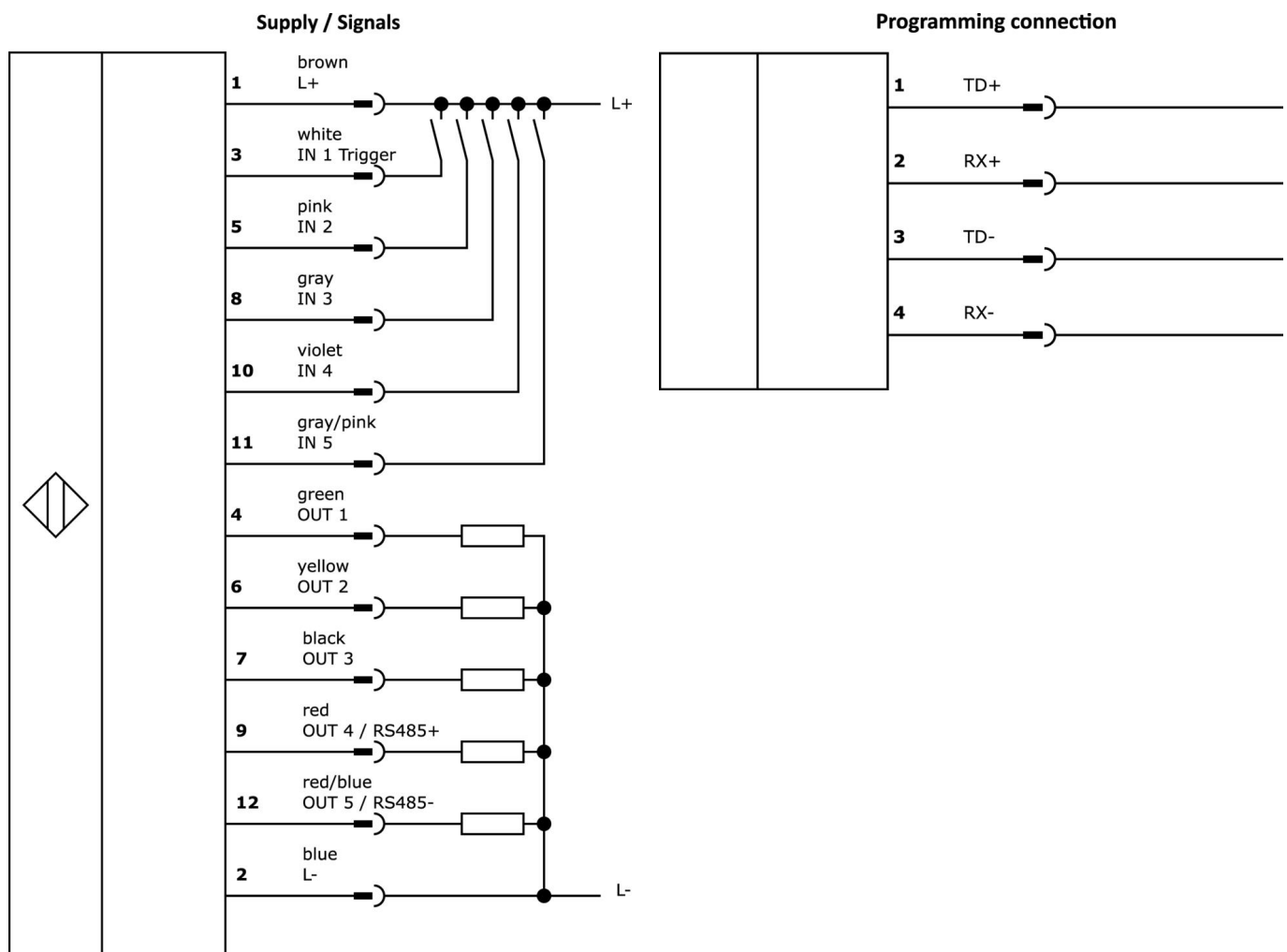
### Classification

ETIM 8	EC001511 Camera for surveillance system
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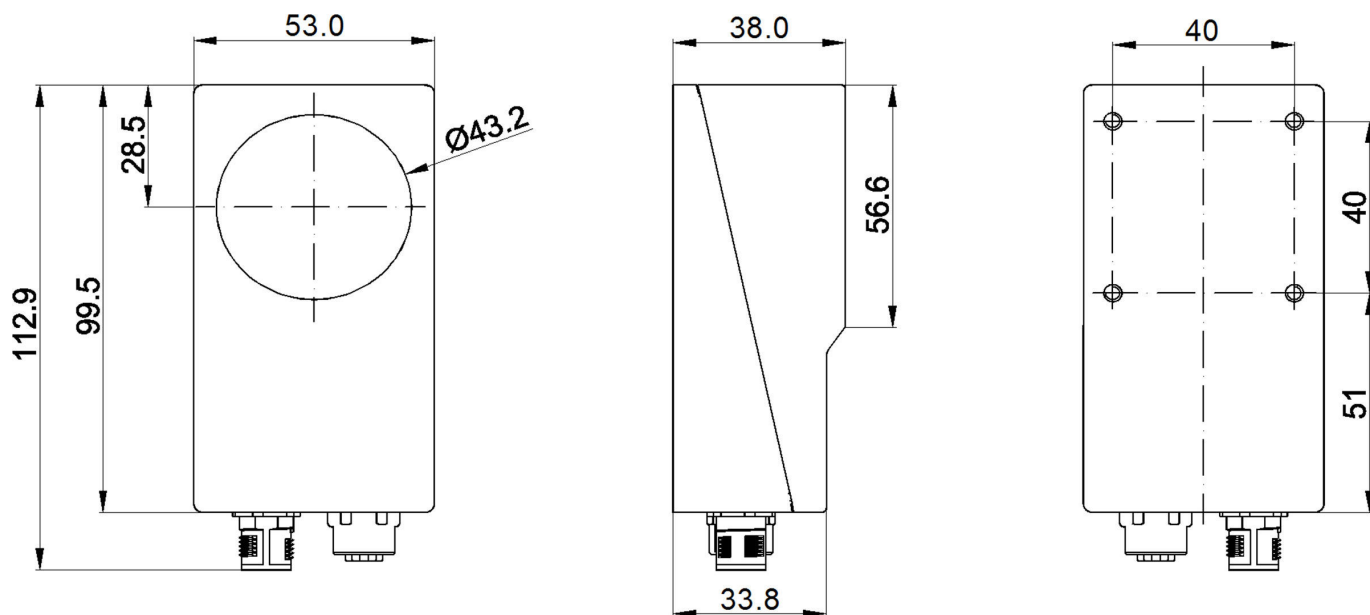
## More

IPF Product Group	715 camera sensors
packaging dimensions	205 x 142 x 125 mm
gross weight	430 g
Customs tariff number	90314990
WEEE number	40951076
OzDS-compliant	Yes
POP-compliant	Yes
Reach-compliant	Yes
RoHS-compliant	Yes

## Connection



## Dimensional drawing



## Extract accessories program

### EF750170



LED dark field light,  
130x141x12mm, inner diameter  
75mm, white light, 6W, 5000K, 22-  
26V DC, M8 connector 4-pin, IP54,  
aluminum+PMMA

### EF750670



LED dark field light,  
130x141x12mm, inner diameter  
75mm, blue light, 6W, 465nm, 22-  
26V DC, M8 connector 4-pin, IP54,  
aluminum+PMMA

### AO000523



accessories optical, Interference /  
polarizing filter, 12x57x58mm,  
Other+Acrylic glass

### EE500170



LED dome light, 100x100x52 mm,  
white light, 6W, 5000K, 23-25V  
DC, M8 connector 4-pin, IP20,  
aluminum

### EE500770



LED dome light, 100x100x52 mm,  
red light, 3W, 625 nm, 23-25V DC,  
M8 connector 4-pin, IP20,  
aluminum

### ED1E0770



LED transmitted light,  
150x120x12mm, red light  
unpolarized, 9W, 625nm, 24V DC,  
M8 connector 4-pin, IP54,  
aluminum+PMMA

### ED1E0170



LED transmitted light,  
150x120x12mm, white light, 11W,  
5000K, 24V DC, M8 connector 4-  
pin, IP54, aluminum+PMMA

### AO000319



LED line light, camera, 14x100mm,  
infrared light, 3.6W, 10-30V DC,  
M5 connector, IP50,  
aluminum+plastic

### AO98E124



LED line light, camera,  
30x60x497mm, white light, 21.  
6W, 5000K, 24V, M8 connector 3-  
pin, IP40, aluminum+acrylic glass

You can find further accessories on our homepage

## Installation



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

## Disposal



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**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.
- / Any software, drivers or IODD files that may be required to operate your device can be downloaded free of charge from our homepage: [www.ipf-electronic.com](http://www.ipf-electronic.com)