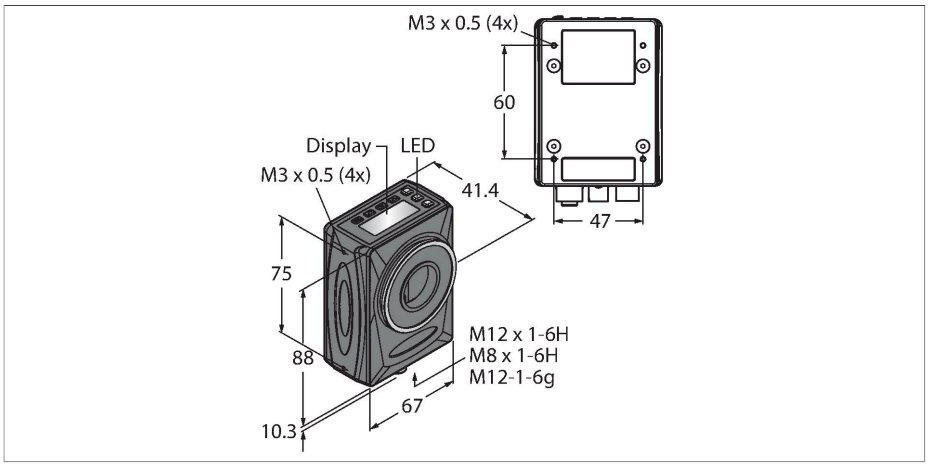
VE201G1A
Image Processing – Smart Camera



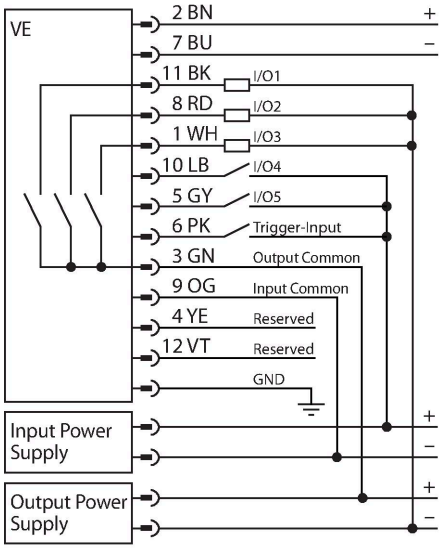
Technical data

Type	VE201G1A
ID	3801542
Camera data	
Function	Multifunctional
Resolution	1280 x 1024 Pixels
Pixel size	5.3 µm
Frame rate	60 fps
Exposure time	0.02…500 ms
Internal memory	500 MB
Number of inspections	≤ 999
Lens	C-Mount
Electrical data	
Operating voltage	12…30 VDC
DC rated operational current	≤ 400 mA
Short-circuit protection	yes
Reverse polarity protection	yes
Communication protocol	EtherNet/IP FTP Modbus TCP PCCC PROFINET RS232
Output function	Input/output programmable, 5 × PNP/ NPN optically decoupled
Power on display	LED, Green
Switching state	LED, Yellow
Error indication	LED, red
Mechanical data	
Design	Rectangular, VE

Features

- Image processing tools: grayscale value, object, edge and positioning functions; pattern, blob, blemish and bead detection
- Analysis tools: mathematical operations and measuring function
- Vision manager software with intuitive user interface
- 1/1.8“ CMOS, 1.3 MP image sensor
- 2-line, 8-segment LCD display with push-buttons
- 5 x PNP/NPN, input/output
- External trigger input
- Connection for external lighting
- Supports Ethernet protocol PROFINET, EtherNet/IP and Modbus/TCP)
- Protection class IP20, IP67 with lens cover (sold separately)
- C-mount lens (sold separately)

Wiring diagram



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Technical data

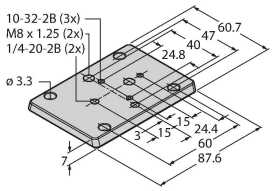
Dimensions	88 x 67 x 41.4 mm
Housing material	Aluminium, AL
Electrical connection	Connector, M12 × 1, 12-wire
Ambient temperature	0…+50 °C
Protection class	IP20 IP67
Tests/approvals	
Approvals	CE, cULus list

Functional principle

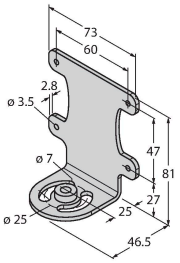
The VE smart camera has a 1.3-megapixel CMOS image sensor and combines the ease of use and configuration (similar to the iVu image sensor) with the powerful complexity and multifunctionality (similar to the PresensePlus P4) of an image processing system. The vision manager software is an intuitive user interface. It has a variety of editing options, great flexibility in the creation and editing of inspections, as well as the possibility to simulate inspections with an emulator in the course of an application analysis.

Accessories

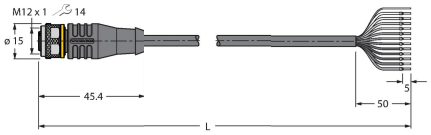
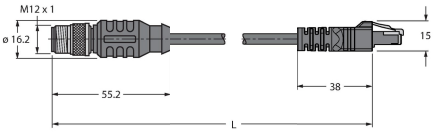
SMBVEMP	3800293
Mounting panel	



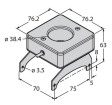
SMBVERA	3097185
Bracket for mounting on right side	



Accessories

Dimension drawing	Type	ID	
	MQDC2S-1206	3011420	Power supply, M12 × 1 female connector, 12-pin, cable length: 1.83 m
	RKS12T-2/TXL	6626917	Connection cable, M12 female connector, straight, 12-pin, shielding on coupling nut; cable length: 2 m, jacket material: PUR, black; cULus approval
	RSS RJ45S 841-2M	U8626-2	Extension cable for Industrial Ethernet, M12 male connector to RJ45 male connector, 8-pin, cable length: 2 m, jacket material: TPE, green, shielded, stranded wires, twisted pair

Accessories

Dimension drawing	Type	ID	
	LEDRRV70XD5-PM	3097364	High-intensity LED ring light, adjustable via potentiometer, for installation and control on a VE smart camera, light color: red

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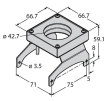	LEDRRV62X62M	3097378	LED ring light for installation and control on a VE smart camera, light color: red
	VELC60-PC	3097182	Lens cover, length: 60 mm, Window material: Polycarbonate

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