

B50S100

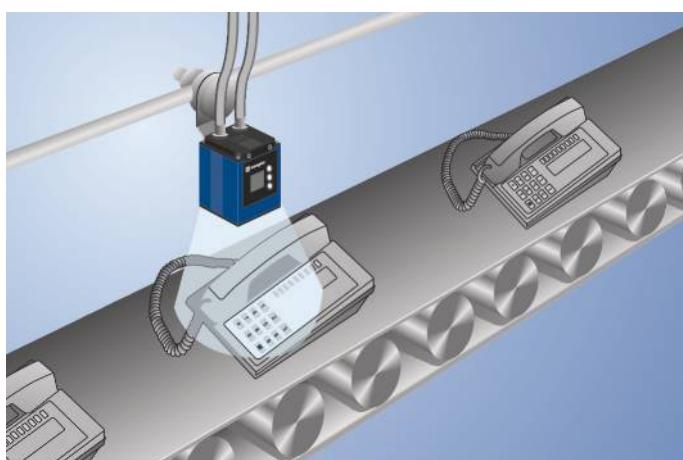
weQubeVision

Part Number



- Image processing functions
- MultiCore technology

The vision sensor weQubeVision is based on the wennglor MultiCore technology. The functions autofocus, region of interest and tracking ensure optimal object detection. The following image processing modules are available: Dimensional accuracy check, sorting procedures, presence control, object counting, position output, pixel counting, filter options, and statistics evaluation. Thanks to the integrated color image chip, all image processing functions are also available for remote applications.



Technical Data

Optical Data

Working Range	≥ 20 mm
Resolution	736 × 480 Pixel
Image Chip	color
Light Source	White Light
Service Life (T = +25 °C)	100000 h
Visual Field	see Table 1
Frame Rate	15 Hz

Electrical Data

Supply Voltage	18...30 V DC
Current Consumption (Ub = 24 V)	< 200 mA
Response Time	66 ms
Temperature Range	-25...55 °C*
Inputs/Outputs	6
Switching Output Voltage Drop	< 2,5 V
Switching Output/Switching Current	100 mA
Short Circuit Protection	yes
Reverse Polarity Protection	yes
Interface	RS-232/Ethernet
Protection Class	III

Mechanical Data

Setting Method	Ethernet
Housing Material	Aluminum
Degree of Protection	IP67
Connection	M12 × 1; 12-pin
Type of Connection Ethernet	M12 × 1; 8-pin, X-cod.

Safety-relevant Data

MTTFd (EN ISO 13849-1)	227,7 a
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Function

Presence Check	yes
Pixel Comparison	yes
Reference Image Comparison	yes
Tracking	yes
Object detection	yes
Dimensional accuracy check	yes
Web server	yes

Configurable as PNP/NPN/Push-Pull

Switchable to NC/NO

Illumination Output

RS-232 Interface

Ethernet

PROFINET I/O, CC-A

EtherNet/IP™

002 | 1008

X2

Control Panel No.

50 | 87

Suitable Connection Equipment No.

560

Suitable Mounting Technology No.

Display brightness may decrease with age. This does not result in any impairment of the sensor function.

* -25 °C: Ambient conditions should not result in condensation; avoid the formation of ice on the front panel!

55 °C: Continuous illumination at max. 1% or flash mode at 100% brightness with an exposure time of ≤ 5 ms; may affect the service life of the product.

Complementary Products

Disk with Polarization Filter ZNNG004

Illumination Technology

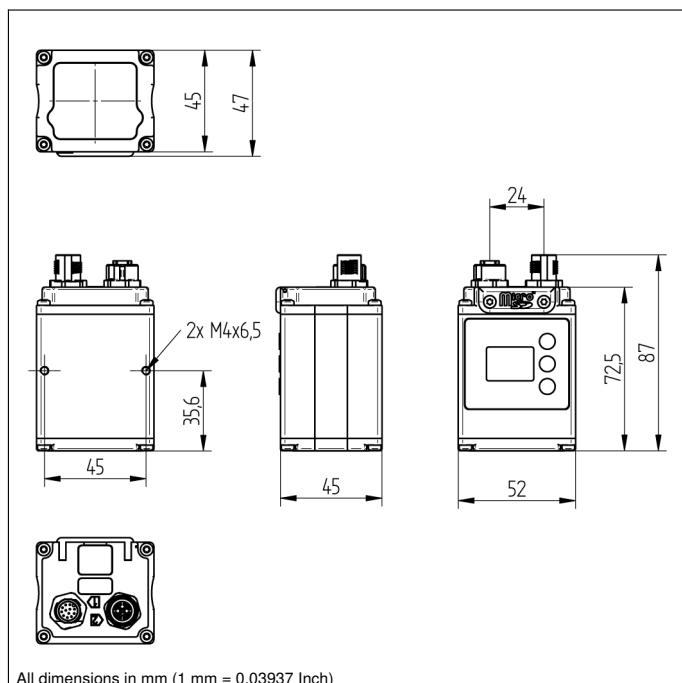
License Upgrade, weQube Pattern Matching DNNL006

Protective Housing ZNNS001, ZNNS002

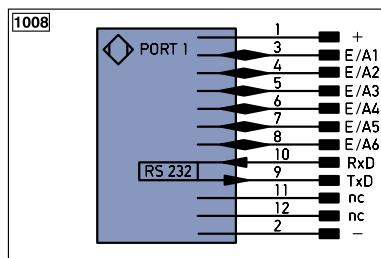
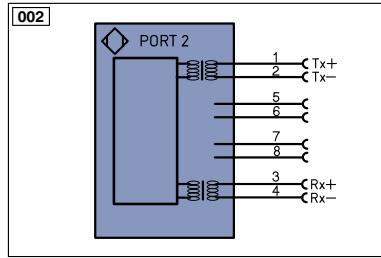
Software

weQubeDecode License Upgrade DNNL002

weQubeOCR License Upgrade DNNL003



All dimensions in mm (1 mm = 0.03937 Inch)


Legend

PT	Platinum measuring resistor
nc	not connected
U	Test Input
Ü	Test Input inverted
W	Trigger Input
W -	Ground for the Trigger Input
O	Analog Output
O -	Ground for the Analog Output
BZ	Block Discharge
Awv	Valve Output
a	Valve Control Output +
b	Valve Control Output 0 V
SY	Synchronization
SY -	Ground for the Synchronization
E+	Receiver-Line
S+	Emitter-Line
±	Grounding
SnR	Switching Distance Reduction
Rx+/-	Ethernet Receive Path
Tx+/-	Ethernet Send Path
Bus	Interfaces-Bus A(+)/B(-)
La	Emitted Light disengageable
Mag	Magnet activation
RES	Input confirmation
EDM	Contactor Monitoring
ENars422 Encoder A/Ä (TTL)	
ENBrs422 Encoder B/ß (TTL)	
ENA Encoder A	
ENB Encoder B	
AMIN Digital output MIN	
AMAX Digital output MAX	
AOK Digital output OK	
SY IN Synchronization IN	
SY OUT Synchronization OUT	
OLT Brightness output	
M Maintenance	
rsv reserved	
Wire Colors according to IEC 60757	
BK	Black
BN	Brown
RD	Red
OG	Orange
YE	Yellow
GN	Green
BU	Blue
VT	Violet
GY	Grey
WH	White
PK	Pink
GNYE Green/Yellow	

Table 1

Working Distance	20 mm	100 mm	200 mm
Visual Field	24 x 16 mm	74 x 48 mm	145 x 94 mm

