

# B50M001

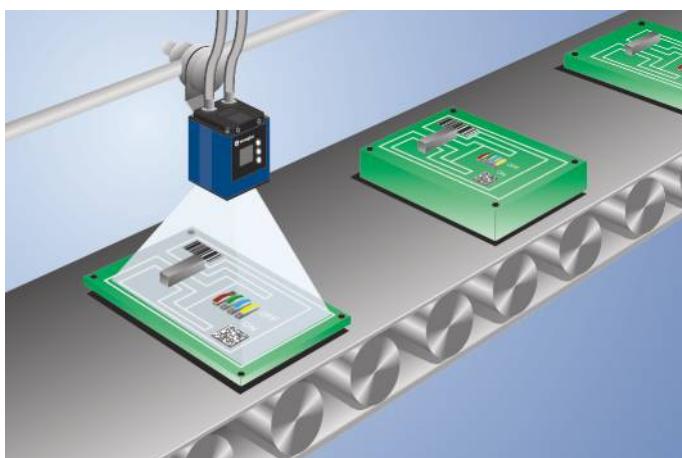
weQube

Part Number



- **Image processing functions**
- **MultiCore technology**
- **OCR reading**
- **Pattern matching**
- **Reading of printed and directly marked 1D and 2D codes**

The smart camera weQube is based on the wenglor MultiCore technology and combines the function of the scanner and the vision sensors. Therefore, this product allows to capture all established 1D codes and various 2D code types. Autofocus, region of interest and tracking ensure reliable and stable image recording. The following image processing modules are available: Dimensional accuracy check, sorting procedures, presence control, object counting, position output, pixel counting, optical character recognition, pattern matching, filter options, and statistics evaluation.



## 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
OCR	yes
Object detection	yes
Dimensional accuracy check	yes
1D and 2D code reading	yes
Pattern matching	yes
Web server	yes

Configurable as PNP/NPN/Push-Pull	
Switchable to NC/NO	●
Illumination Output	●
RS-232 Interface	●
Ethernet	●

Connection Diagram No.	002   1008
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Control Panel No.	X2
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Suitable Connection Equipment No.	50   87
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Suitable Mounting Technology No.	560
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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.

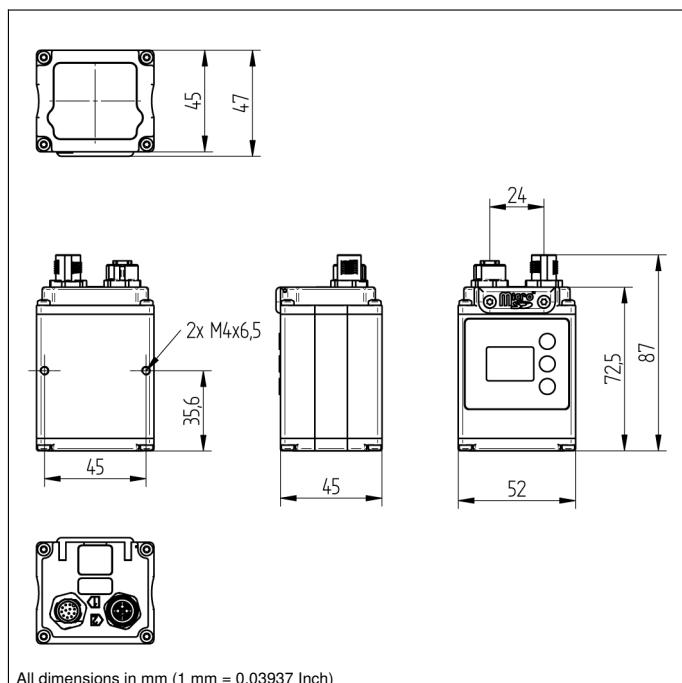
## Complementary Products

Disk with Polarization Filter ZNNG004

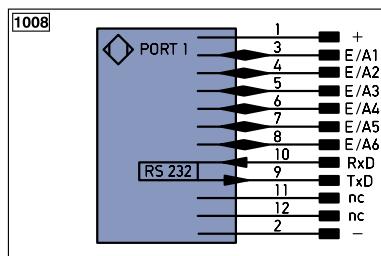
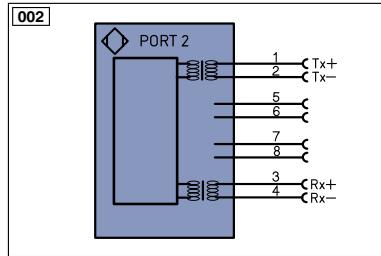
Illumination Technology

Protective Housing ZNNS001, ZNNS002

Software



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

