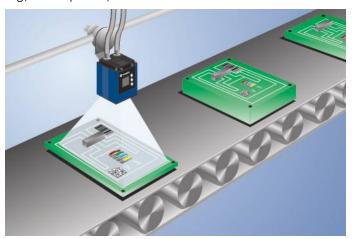
B50M001

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

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	1830 V DC
Current Consumption (Ub = 24 V)	< 200 mA
Response Time	66 ms
Temperature Range	-2555 °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
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
Control Panel No.	X2
Suitable Connection Technology No.	50 87
Suitable Mounting Technology No.	560
Display brightness may decrease with age. This does no	ot result in any impairment of the

weQube

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

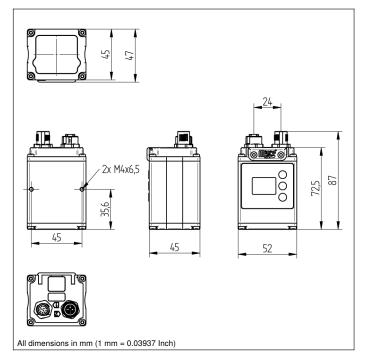
 * -25 $^{\circ}$ C: Ambient conditions should not result in condensation; avoid the formation of ice on the front panel!

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





Ctrl. Panel

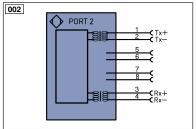


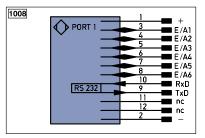
20 = Enter Button

22 = UP Button

23 = Down Button

60 = Display





Leger	na	PT	Platinum measuring resistor	ENA	Encoder A
+	Supply Voltage +	nc	not connected	ENB	Encoder B
-	Supply Voltage 0 V	U	Test Input	Amin	Digital output MIN
~	Supply Voltage (AC Voltage)	Ū	Test Input inverted	Амах	Digital output MAX
Α	Switching Output (NO)	W	Trigger Input	Аок	Digital output OK
Ā	Switching Output (NC)	0	Analog Output	SY In	Synchronization In
V	Contamination/Error Output (NO)	0-	Ground for the Analog Output	SY OUT	Synchronization OUT
V	Contamination/Error Output (NC)	BZ	Block Discharge	OLT	Brightness output
E	Input (analog or digital)	Awv	Valve Output	М	Maintenance
Т	Teach Input	а	Valve Control Output +		
Z	Time Delay (activation)	b	Valve Control Output 0 V		
S	Shielding	SY	Synchronization	Wire Colors according to	
RxD	Interface Receive Path	E+	Receiver-Line	DIN IEC 757	
TxD	Interface Send Path	S+	Emitter-Line	BK	Black
RDY	Ready	+	Grounding	BN	Brown
GND	Ground	SnR	Switching Distance Reduction	RD	Red
CL	Clock	Rx+/-	Ethernet Receive Path	OG	Orange
E/A	Output/Input programmable	Tx+/-	Ethernet Send Path	YE	Yellow
0	IO-Link	Bus	Interfaces-Bus A(+)/B(-)	GN	Green
PoE	Power over Ethernet	La	Emitted Light disengageable	BU	Blue
IN	Safety Input	Mag	Magnet activation	VT	Violet
OSSD	Safety Output	RES	Input confirmation	GY	Grey
Signal	Signal Output	EDM	Contactor Monitoring	WH	White
BI_D+/-	- Ethernet Gigabit bidirect. data line (A-D)	ENARS422	Encoder A/Ā (TTL)	PK	Pink
	Encoder 0-pulse 0-0 (TTL)		Encoder B/B (TTL)	GNYE	Green/Yellow

Table 1

Working Distance	20 mm	200 mm	1000 mm
Visual Field	16 × 12 mm	120 × 90 mm	600 × 450 mm









