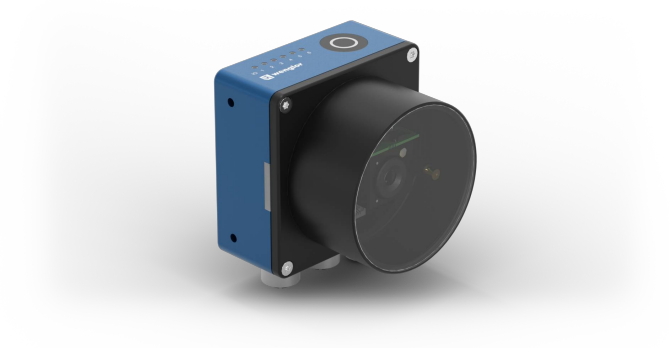
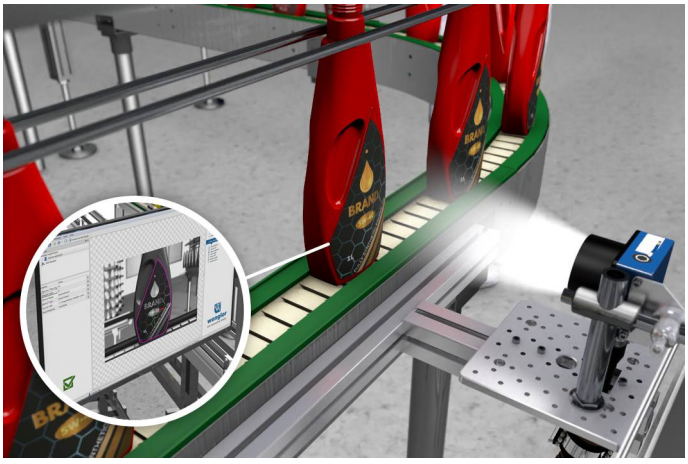
Smart Camera
uniVision Script

B60P111
Part Number



- **Computing power of vision system in sensor format**
- **Condition monitoring (including position monitoring via position sensor)**
- **Expandable, modular hardware design**
- **State-of-the-art communication interfaces incl. PoE functionality**
- **User-friendly vision tools paired with individual programming**

The Smart Camera B60 offers the functionality and performance of a full-fledged image processing system and is therefore suitable for even complex image processing applications. Image recording and evaluation by the high-performance, easy-to-use uniVision image processing software are combined in a compact and robust modular housing. Thanks to the uniVision Script license package, users can switch flexibly between parametrization and programming solutions. Seamless integration of HALCON scripts enables secure and flexible data exchange.



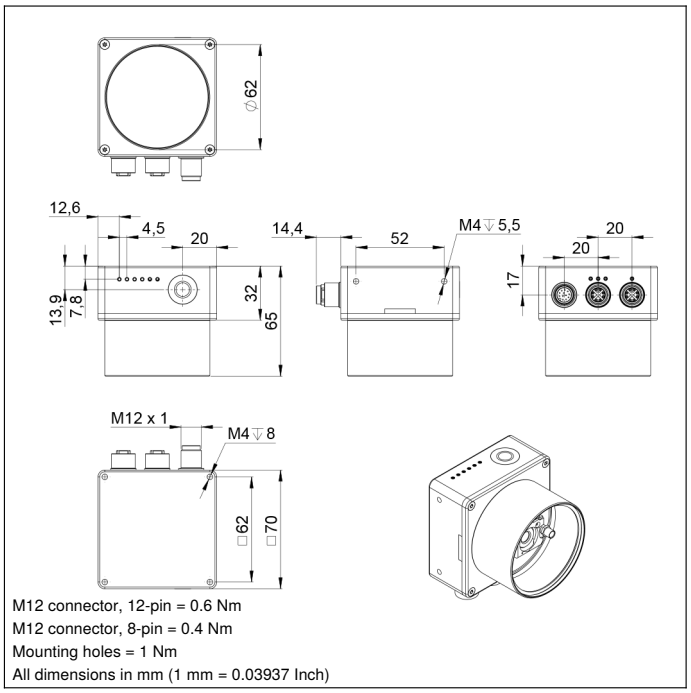
Technical Data

Optical Data	
Working Range	> 50 mm
Resolution	1440 × 1080 Pixel
Resolution	1,6 MP
Focal distance	6 mm
Image Chip	color
Image chip size	1/2,9"
Pixel Size	3,45 × 3,45 µm
Light Source	Z60F illumination module
Optics	Auto-focus wide
Laser Class (EN 60825-1)	1
Frame rate (fullframe)	≤ 59 fps
Environmental conditions	
Temperature Range	0...40 °C
Storage temperature	0...70 °C
Atmospheric humidity	5...95%, non-condensing
Shock resistance per DIN IEC 68-2-27	30 g / 11 ms
Vibration resistance per DIN EN 60068-2-64	6 g (10...55 Hz)
Electrical Data	
Supply Voltage	24 V DC
Current Consumption (Ub = 24 V)	< 700 mA
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	Ethernet
Baud Rate Ethernet	1 Gbit/s
Baud Rate PROFINET	100 Mbit/s
Industry protocols	EtherCAT
Industry protocols	EtherNet/IP™
Industry protocols	PROFINET Class B
General protocols	FTP
General protocols	sFTP
General protocols	TCP/IP
General protocols	UDP
Protection Class	III
RAM	4 GB
Storage Capacity	32 GB
PoE Class	4
Mechanical Data	
Setting Method	Web server
Minimum object distance	50 mm
Housing Material	Aluminum, anodised
Optic Cover	Plastic, PMMA
Degree of Protection	IP67
UL Enclosure Type	1
Connection	M12 × 1; 12-pin
Type of Connection Ethernet	M12 × 1, 8-pin, X-coded (2×)
Safety-relevant Data	
MTTFd (EN ISO 13849-1)	149,4 a
Function	
Multizone Distance Sensor	yes *
Software	uniVision 3
License package	uniVision Script
PNP NO	●

* When using a lighting module

Current peaks of up to 800 mA may occur during start-up

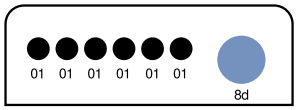
From revision C: 4 GB RAM and 32 GB memory; PoE Class 4



M12 connector, 12-pin = 0.6 Nm
M12 connector, 8-pin = 0.4 Nm
Mounting holes = 1 Nm
All dimensions in mm (1 mm = 0.03937 Inch)

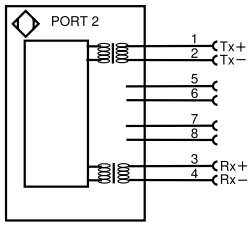
Ctrl. Panel

B5

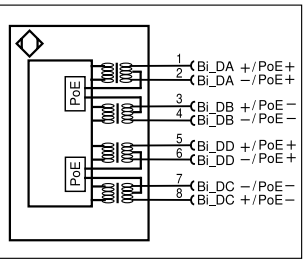


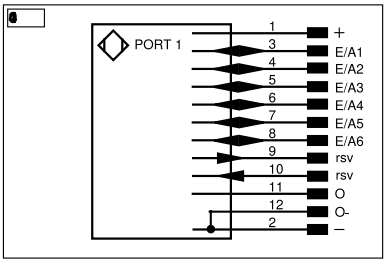
01 = Switching Status Indicator
8d = button

002



008





Legend					
+	Supply Voltage +	PT	Platinum measuring resistor	ENARS422	Encoder A/Ā (TTL)
–	Supply Voltage 0 V	nc	Not connected	ENBRS422	Encoder B/B̄ (TTL)
~	Supply Voltage (AC Voltage)	U	Test Input	ENA	Encoder A
A	Switching Output (NO)	Ū	Test Input inverted	ENB	Encoder B
Ā	Switching Output (NC)	W	Trigger Input	AMIN	Digital output MIN
V	Contamination/Error Output (NO)	W–	Ground for the Trigger Input	AMAX	Digital output MAX
V̄	Contamination/Error Output (NC)	O	Analog Output	AOK	Digital output OK
E	Input (analog or digital)	O–	Ground for the Analog Output	SY In	Synchronization In
T	Teach Input	BZ	Block Discharge	SY OUT	Synchronization OUT
R	Reset input	AMV	Valve Output	OLT	Brightness output
Z	Time Delay (activation)	a	Valve Control Output +	M	Maintenance
S	Shielding	b	Valve Control Output 0 V	rsv	Reserved
RxD	Interface Receive Path	SY	Synchronization	Wire Colors according to DIN IEC 60757	
TxD	Interface Send Path	SY–	Ground for the Synchronization	BK	Black
RDY	Ready	E+	Receiver-Line	BN	Brown
GND	Ground	S+	Emitter-Line	RD	Red
CL	Clock	⏚	Grounding	OG	Orange
E/A	Output/Input programmable	SnR	Switching Distance Reduction	YE	Yellow
	IO-Link	Rx+/–	Ethernet Receive Path	GN	Green
PoE	ower over Ethernet	Tx+/–	Ethernet Send Path	BU	Blue
IN	Safety Input	Bus	Interfaces-Bus A(+)/B(–)	VT	Violet
OSSD	Safety Output	La	Emitted Light disengageable	GY	Grey
Signal	Signal Output	Mag	Magnet activation	WH	White
BI_D+/–	Ethernet Gigabit bidirect. data line (A-D)	RES	Input confirmation	PK	Pink
EN0 RS422	Encoder 0-pulse 0/0̄ (TTL)	EDM	Contactor Monitoring	GNYE	Green/Yellow

Specifications are subject to change without notice V2-15.10.2026