

- **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**

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. Additional software modules can be added at any time using upgrade licenses.



Technical Data

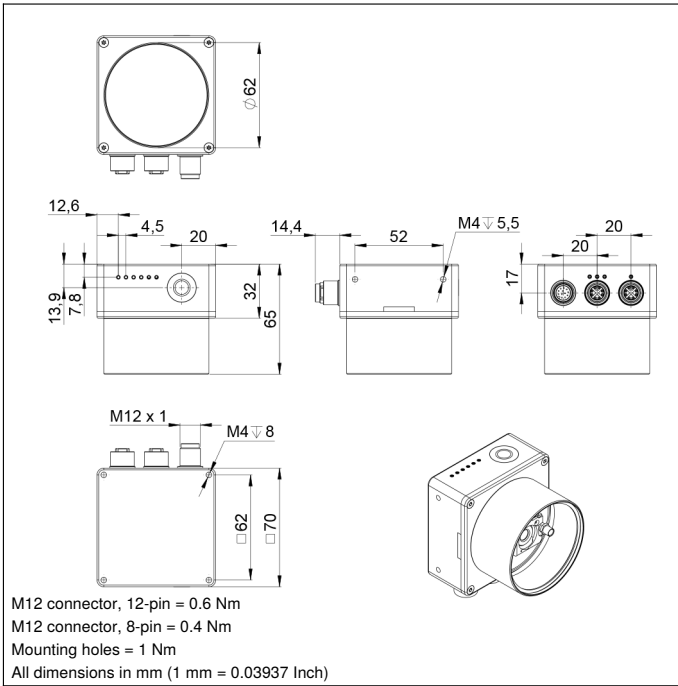
Optical Data	
Working Range	> 100 mm
Resolution	2448 × 2048 Pixel
Resolution	5 MP
Focal distance	17,5 mm
Image Chip	monochrome
Image chip size	1/1,8"
Pixel Size	2,74 × 2,74 μm
Light Source	Z60F illumination module
Optics	Auto-focus narrow
Laser Class (EN 60825-1)	1
Frame rate (fullframe)	≤ 67 fps
Environmental 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 (U _b = 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	100 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

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

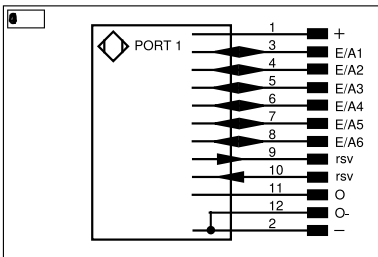
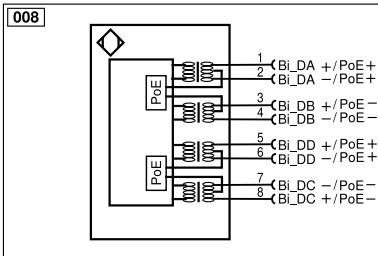
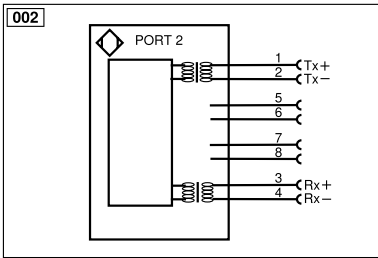


Ctrl. Panel

B5



01 = Switching Status Indicator
 8d = button



Legend			
+	Supply Voltage +	PT	Platinum measuring resistor
-	Supply Voltage 0 V	nc	Not connected
~	Supply Voltage (AC Voltage)	U	Test Input
A	Switching Output (NO)	Ū	Test Input inverted
Ā	Switching Output (NC)	W	Trigger Input
V	Contamination/Error Output (NO)	W-	Ground for the Trigger Input
ṽ	Contamination/Error Output (NC)	O	Analog Output
E	Input (analog or digital)	O-	Ground for the Analog Output
T	Teach Input	BZ	Block Discharge
R	Reset input	Amv	Valve Output
Z	Time Delay (activation)	a	Valve Control Output +
S	Shielding	b	Valve Control Output 0 V
RxD	Interface Receive Path	SY	Synchronization
TxD	Interface Send Path	SY-	Ground for the Synchronization
RDY	Ready	E+	Receiver-Line
GND	Ground	S+	Emitter-Line
CL	Clock	⊕	Grounding
E/A	Output/Input programmable	SnR	Switching Distance Reduction
IO-Link	IO-Link	Rx+/-	Ethernet Receive Path
PoE	Power over Ethernet	Tx+/-	Ethernet Send Path
IN	Safety Input	Bus	Interfaces-Bus A(+)/B(-)
QSSD	Safety Output	La	Emitted Light disengageable
Signal	Signal Output	Mag	Magnet activation
Bi_D+/-	Ethernet Gigabit bidirect. data line (A-D)	RES	Input confirmation
ENo RS422	Encoder 0-pulse 0/0 (TTL)	EDM	Contacting Monitoring
			ENARs422 Encoder A/Ā (TTL)
			ENBRs422 Encoder B/B̄ (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 DIN 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

