

3D Sensor

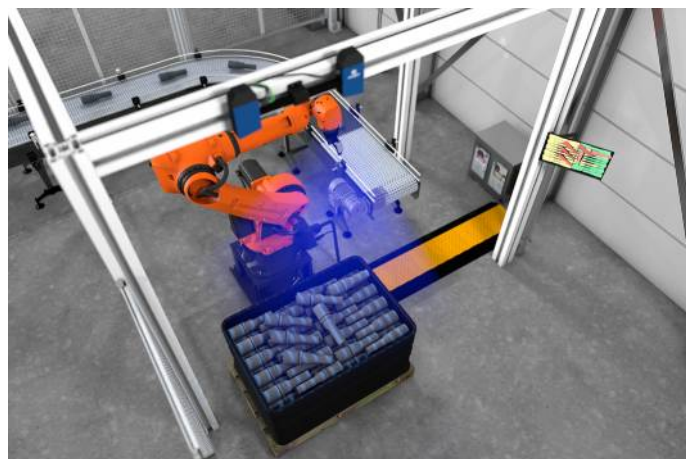
MLBS111

Part Number



- 5 MP resolution
- Easy integration via SDK or GigE Vision
- High point cloud quality with up to four 3D point clouds per second
- Integrated 3D point cloud calculation

The three variants of the ShapeDrive MLBS series are optimally designed for crates and pallets with their symmetrical design and large measuring volumes. The robust design makes the MLBS sensors suitable for use in industrial environments. With its fast Ethernet interface and three measuring ranges, ShapeDrive G4 is distinguished by great diversity and high speed.



Technical Data

Optical Data

Working range Z	1050...1450 mm
Measuring range Z	400 mm
Measuring range X	500 mm
Measuring range Y	380 mm
Resolution Z	40 µm
Resolution X/Y	281 µm
Camera Resolution	2448 × 2048 Pixel
Light Source	LED (blue)
Wavelength	457 nm
Service Life (T = +25 °C)	20000 h
Risk Group (EN 62471)	2

Environmental conditions

Ambient temperature	0...35 °C
Storage temperature	-5...70 °C
Max. Ambient Light	20000 Lux

Electrical Data

Supply Voltage	18...30 V DC
Max. Current Consumption (Ub = 24 V)	3,5 A
Recording duration	0,28 s
Inputs/Outputs	4
Short Circuit Protection	yes
Reverse Polarity Protection	yes
Interface	Ethernet TCP/IP
Baud Rate	1000/10000 Mbit/s
Protection Class	III

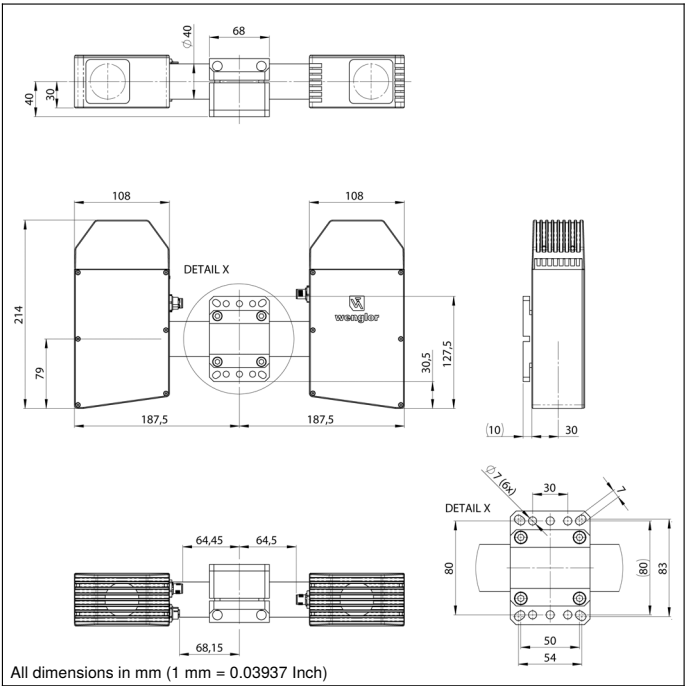
Mechanical Data

Housing Material	Aluminium; Plastic
Degree of Protection	IP67
Type of Connection Power	M12 × 1; 5-pin
Type of connection digital I/O ports	M12 × 1; 12-pin
Type of Connection Ethernet	M12 × 1; 8-pin, X-cod.
Optic Cover	Plastic
Weight	< 4500 g

Web server	yes
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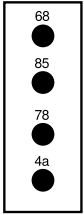
Connection Diagram No.	250 251 1022
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Control Panel No.	A22
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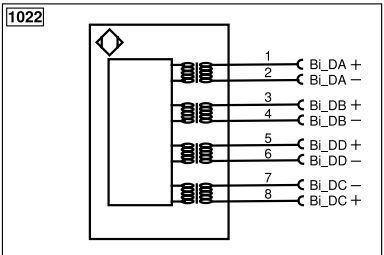
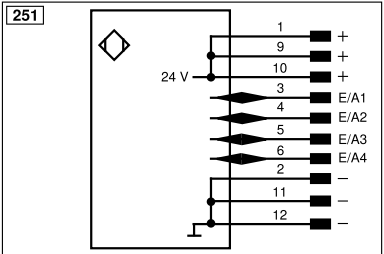
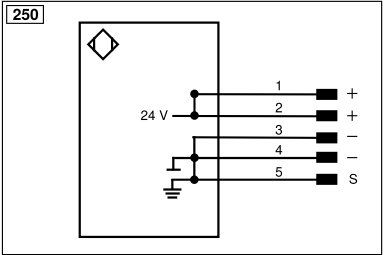


Ctrl. Panel

A22



4a = User LED
68 = supply voltage indicator
78 = Module status
85 = Link/Act LED



Legend			
+	Supply Voltage +	nc	Not connected
-	Supply Voltage 0 V	U	Test Input
~	Supply Voltage (AC Voltage)	Ü	Test Input inverted
A	Switching Output (NO)	W	Trigger Input
Ä	Switching Output (NC)	W-	Ground for the Trigger Input
V	Contamination/Error Output (NO)	O	Analog Output
Ȳ	Contamination/Error Output (NC)	O-	Ground for the Analog Output
E	Input (analog or digital)	BZ	Block Discharge
T	Teach 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(-)
OSSD	Safety Output	La	Emitted Light disengageable
Signal	Signal Output	Mag	Magnet activation
Bi_DA+/-	Ethernet Gigabit bidirect. data line (A-D)	RES	Input confirmation
ENo RS422	Encoder 0-pulse 0/Ü (TTL)	EDM	Contact Monitoring
PT	Platinum measuring resistor	ENARIS422	Encoder A/Ä (TTL)
ENBIS422	Encoder B/B (TTL)	ENb	Encoder B
ENa	Encoder A	AMIN	Digital output MIN
AMAX	Digital output MAX	Ack	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		

