

2D/3D Profile Sensor

MLWL173

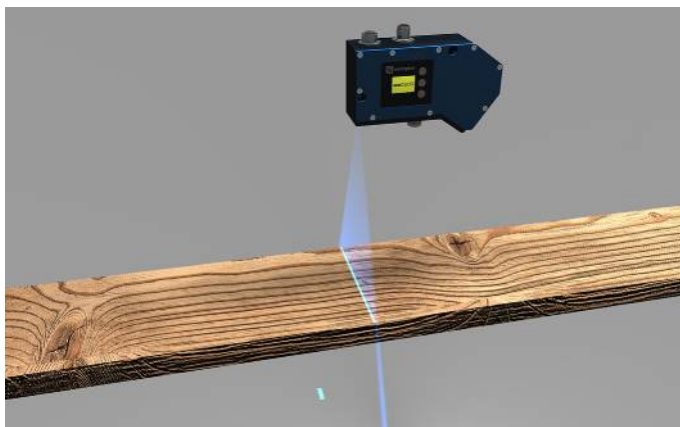
Part Number

weCat3D



- Blue light for applications on metal, organic or semi-transparent materials
- Increased resistance to extraneous light and high speed
- Optimized profile quality thanks to HDR function
- Precise measuring range resolution X (> 2000 measuring points)
- Up to 12 million measuring points per second

2D/3D Profile Sensors project a laser line onto the object to be detected and generate an accurate, linearized height profile with an internal camera which is set up at a triangulation angle. Thanks to its uniform, open interface, the weCat3D series can be incorporated by means of the DLL program library or the GigE Vision standard without an additional control unit. Alternatively, wenglor offers its own software packages for implementing your application.



Technical Data

Optical Data

Working range Z	215...475 mm
Measuring range Z	260 mm
Measuring range X	150...230 mm
Linearity Deviation	65 µm
Resolution Z	9,6...22 µm
Resolution X	79...120 µm
Light Source	Laser (blue)
Wavelength	450 nm
Service Life (T = +25 °C)	20000 h
Laser Class (EN 60825-1)	3B

Environmental conditions

Ambient temperature	0...45 °C
Storage temperature	-20...70 °C
Max. Ambient Light	5000 Lux
EMC	DIN EN 61000-6-2; 61000-6-4
Shock resistance per DIN IEC 68-2-27	30 g / 11 ms
Vibration resistance per DIN IEC 60068-2-6	6 g (10...55 Hz)
Atmospheric humidity	5...95%, non-condensing

Electrical Data

Supply Voltage	18...30 V DC
Current Consumption (U _b = 24 V)	1000 mA
Measuring Rate	175...6000 /s
Subsampling	350...6000 /s
Inputs/Outputs	4
Switching Output Voltage Drop	< 1,5 V
Switching Output/Switching Current	100 mA
Short Circuit Protection	yes
Reverse Polarity Protection	yes
Overload Protection	yes
Interface	Ethernet TCP/IP
Baud Rate	100/1000 Mbit/s
Protection Class	III
FDA Accession Number	1710277-000

Mechanical Data

Housing Material	Aluminum, anodised
Degree of Protection	IP67
UL Enclosure Type	1
Connection	M12 × 1; 12-pin
Type of Connection Ethernet	M12 × 1; 8-pin, X-cod.
Optic Cover	Glass
Web server	yes

Push-Pull

Connection Diagram No.

1022 1034

Control Panel No.

X2 A22

Suitable Connection Equipment No.

50 87

Complementary Products

Connection cables
Control Unit
Cooling Unit ZLWK003
EHSS001 Switch
Machine Vision Controller MVC
Protective Screen Retainer ZLWS003
Software

