Dome Light
White infrared light, 130 mm

LMDX202
Part Number



- **4 sectors selectable**
- **Bicolor**
- **No external control required**
- **OverDrive**
- **Quick and easy replacement of accessories**

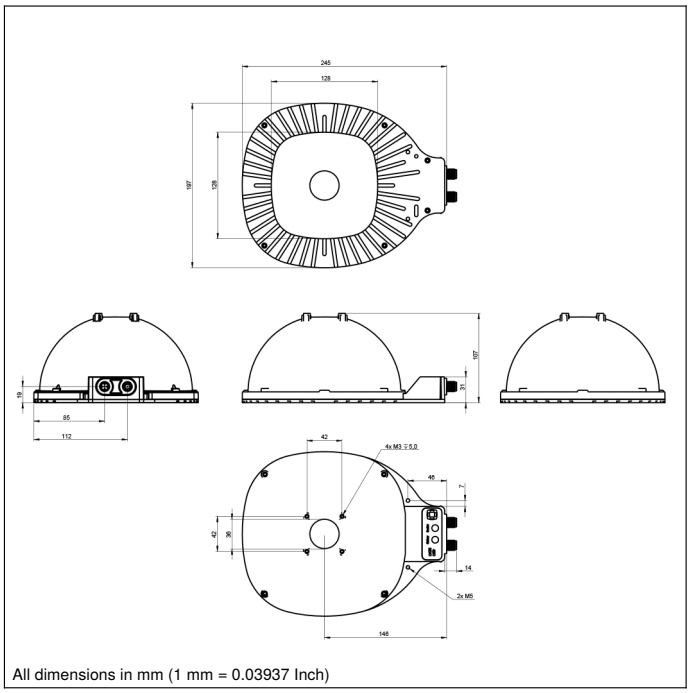
wenglor LMDX series dome lights are particularly suited for homogeneous illumination of glossy parts and demanding surfaces, such as bent metal. The dome is designed to shield the environment and efficiently capture all the light emitted by the ring-shaped light source. This makes it the ideal product for applications with exposure times as low as 100 µs. The product can be operated in continuous mode or synchronized with the machine vision camera in strobe mode with increased intensity (OverDrive).

Technical Data

Optical Data	
Light Source	White-infrared light
Color temperature	5000 K
Wavelength	860 nm
White light output	90200 Lux
Infrared light output	48 W/m²
Measuring point distance	20 mm
Environmental conditions	
Temperature Range	-10...40 °C
Storage temperature	-20...60 °C
Atmospheric humidity	< 80%, non-condensing
Electrical Data	
Supply Voltage	21,6...26,4 V DC
Power	12,96 W
Peak power	61,92 W
Current Consumption Continuous Mode (Ub = 24 V)	0,54 A
Current consumption flash mode OverDrive (operating voltage = 24 V)	2,58 A
Flash duration (max.)	2 ms
Duty cycle (max.)	< 0,1
Rise time	15 µs
Fall time	10 µs
Input signal	NPN
Input signal	PNP
Short Circuit Protection	yes
Reverse Polarity Protection	yes
Overload Protection	yes
Protection Class	III
Dimming	0....10 V ≙ 100...30%
OverDrive	yes
Mechanical Data	
Housing Material	Aluminum, anodised
Housing Material	Plastic, ABS
Housing Material	Plastic, PMMA
Degree of Protection	IP65
UL Enclosure Type	1
Optic Cover	Plastic, PMMA
Connection	M12 × 1; 5-pin
Max. cable lenght	40 m
Camera aperture inner diameter	130 mm
Function	
Operating modes	Continuous, strobe overdrive
Connection Diagram No.	007
Suitable Mounting Technology No.	927

Complementary Products

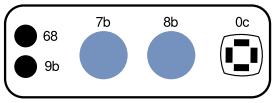
ZC4G003 connection cable
ZDCG004 connection cable
ZDCG005 connection cable



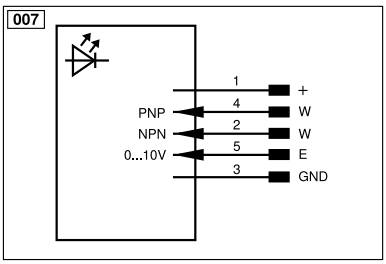
All dimensions in mm (1 mm = 0.03937 Inch)

Ctrl. Panel

T18



0c = sector selection indicator
68 = Power LED
7b = Color Selection Button
8b = Sector Selection Button
9b = Strobe Mode Indicator



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 V4-14.07.2026