# Dome Light
**White infrared light, 130 mm**

## LMDX202

Part Number

- **4 sectors selectable**
- **Bicolor**
- **Highly modular illumination platform**
- **No external control required**
- **Overdrive**
- **Quick and easy replacement of accessories**

wenglor LMDX series dome lights are ideally suited for homogeneous illumination (lighting with a cloudy sky) 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 or strobe mode with increased intensity (overdrive).

Each dome light can be controlled via a lockable control panel and a standardized 5-pin M12 connector for power and strobe signals. The control panel can be disabled via the secondary connection, which can also

## Technical Data

| Optical Data | |
|---|---|
| Light Source | White-infrared light |
| Color temperature | 5000 K |
| Wavelength | 860 nm |
| Risk Group (EN 62471) | 1 |
| White light output | 90200 Lux |
| Infrared light output | 48 W/m² |
| Measuring point distance | 20 mm |
| **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 strobe mode (Ub = 24 V) | 2,58 A |
| Flash Duration | 2 ms |
| Duty Cycle | < 0,1 |
| Rise time | 15 $\mu$s |
| Fall time | 10 $\mu$s |
| Input signal | PNP/NPN |
| Temperature Range | -10...40 °C |
| Storage temperature | -20...60 °C |
| 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 |
| 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 |
| Control Panel No. | T18 |
| Suitable Mounting Technology No. | 927 |

## Complementary Products

| |
|---|
| ZC4G003 connection cable |
| ZDCG004 connection cable |
| ZDCG005 connection cable |
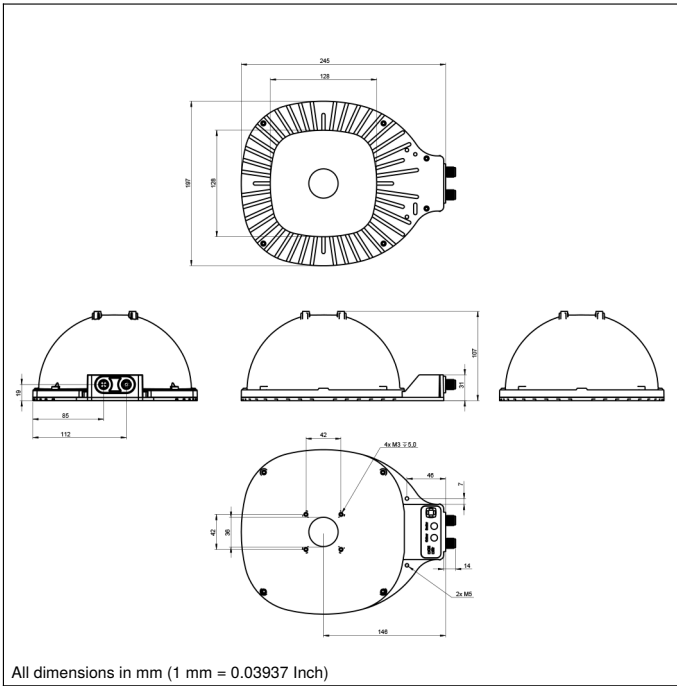
## Ctrl. Panel

All dimensions in mm (1 mm = 0.03937 Inch)
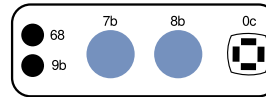
0c = sector selection indicator
68 = supply voltage indicator
7b = Color Selection Button
8b = Sector Selection Button
9b = Strobe Mode Indicator

**007**
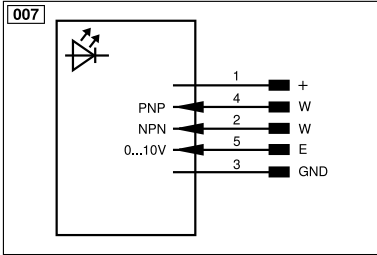
| PNP | 1 | + |
| | 4 | W |
| NPN | 2 | W |
| 0...10V | 5 | E |
| | 3 | GND |

| Legend | | | | | |
|---|---|---|---|---|---|
| + | Supply Voltage + | nc | Not connected | EN_BRS422 | Encoder B/B̄ (TTL) |
| – | Supply Voltage 0 V | U | Test Input | EN_A | Encoder A |
| ~ | Supply Voltage (AC Voltage) | Ū | Test Input inverted | EN_B | Encoder B |
| A | Switching Output (NO) | W | Trigger Input | A_MIN | Digital output MIN |
| Ā | Switching Output (NC) | W– | Ground for the Trigger Input | A_MAX | Digital output MAX |
| V | Contamination/Error Output (NO) | O | Analog Output | A_OK | Digital output OK |
| V̄ | Contamination/Error Output (NC) | O– | Ground for the Analog Output | SY In | Synchronization In |
| E | Input (analog or digital) | BZ | Block Discharge | SY OUT | Synchronization OUT |
| T | Teach Input | A_MV | Valve Output | O_LT | 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 |
| EN_0 RS422 | Encoder 0-pulse 0/0̄ (TTL) | EDM | Contactor Monitoring | GNYE | Green/Yellow |
| PT | Platinum measuring resistor | EN_ARS422 | Encoder A/Ā (TTL) | | |

UKCA   CE   RoHS   ⬨⬨⬨   c UL us LISTED  IND. CONT. EQ  72HL / E169727  For use in class 2 circuits