



## Measuring automation light grids Profibus , MLG, MLG PROFIBUS

MLG5-1600P811



Model Name > **MLG5-1600P811**  
Part No. > **1065047**



#### At a glance

- Integrated PROFIBUS interface
- Resolutions of 10 / 20 / 30 / 50 mm and customer-specific resolutions
- Working range up to 8.5 m
- Detection heights of over 3 m and up to 240 beams possible
- Short response time
- External teach-in for optimal sensitivity settings

#### Your benefits

- Integrated PROFIBUS User Organization (PNO) number and GSD file for easy connection to a PLC
- Low cabling requirement reduces installation costs
- Easy-to-see light grid status information via the bus system helps avoid interrupting operation
- Different beam separation options, detection heights and output configurations ensure a reliable solution



#### Features

|                                  |                             |
|----------------------------------|-----------------------------|
| Technology:                      | Sender/receiver             |
| Minimum detectable object (MDO): | Parallel beam: $\geq 55$ mm |
| Beam separation:                 | 50 mm                       |
| Number of beams:                 | 33                          |
| Detection height:                | 1,600 mm                    |
| Configuration:                   | GSD data file               |

#### Performance

|                               |                               |
|-------------------------------|-------------------------------|
| Maximum range <sup>1)</sup> : | 7 m                           |
| Minimum range:                | Parallel beam: $\geq 0$ mm    |
| Response time <sup>2)</sup> : | Parallel beam: $\geq 5.95$ ms |
| Working range:                | 5 m                           |

<sup>1)</sup> No reserve for environmental issue and deterioration of the diode      <sup>2)</sup> With resistive load

#### Interfaces

|                  |                           |
|------------------|---------------------------|
| Output type:     | 1 x PNP                   |
| Inputs:          | 1 x PNP                   |
| Connection type: | Male connector M12, 8-pin |

## Mechanics/electronics

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|                                            |                                                                                                       |
|--------------------------------------------|-------------------------------------------------------------------------------------------------------|
| Wave length:                               | IR 880 nm                                                                                             |
| Supply voltage Vs:                         | DC 18 V ... 30 V                                                                                      |
| Power consumption sender <sup>1)</sup> :   | 206 mA                                                                                                |
| Power consumption receiver <sup>2)</sup> : | 199 mA                                                                                                |
| Output current I <sub>max</sub> :          | 100 mA                                                                                                |
| Output load capacitive:                    | 100 nF                                                                                                |
| Output load inductive:                     | 1 H                                                                                                   |
| Initialization time:                       | 1 s                                                                                                   |
| Dimensions (W x H x D):                    | 34 mm x 1,714 mm x 29 mm                                                                              |
| Housing material:                          | Aluminum                                                                                              |
| Indication:                                | 7-segment display, LED                                                                                |
| Synchronization:                           | Cable                                                                                                 |
| Circuit protection:                        | Output Q short-circuit protected, Interference suppression, VS connections reverse-polarity protected |
| Weight:                                    | 4.18 kg                                                                                               |
| Power consumption:                         | 206 mA <sup>3)</sup>                                                                                  |
| Front screen:                              | PMMA                                                                                                  |

<sup>1) 2) 3)</sup> Without load with 24 V

## Ambient data

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|                                      |                                                    |
|--------------------------------------|----------------------------------------------------|
| Protection class:                    | III                                                |
| EMC:                                 | EN 60947-5-2                                       |
| Ambient temperature:                 | Operation: -25 ... +55 °C, Storage: -40 ... +70 °C |
| Ambient light safety <sup>1)</sup> : | Direct: ≥12,500 lx, Indirect: ≥50,000 lx           |
| Vibration resistance:                | 5 g, 10 Hz ... 55 Hz (IEC 68-2-6)                  |
| Shock load:                          | 10 g/IEC 68-2-29/16 ms                             |

<sup>1)</sup> Sunlight

Dimensional drawing



Adjustments DIP switches



## Adjustments receiver



blinks with 3 Hz  
 on  
 out  
 on or out

- |1| Supply voltage
- |2| Device error
- |3| No object in the light path
- |4| Pollution indication
- |5| Blocked Beams Hold (BBH)
- |6| Activated teach-in procedure
- |7| ParamMode is active
- |8| standby
- |9| Error: E1 = sync. error; E2 = less receiver signal; E9 = defect

## Connection type and diagram



### Sender



### Receiver



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