

 **REER**

*Your future's safe!*



**new**

Now with

 **IO-Link**

***Michron***

measurement and automation light curtains

*short form*



Aluminum casing  
Anodized

-10 ... +55° C  
Operating temperature  
Ideal also in cold storage facilities

Up to 5 mm  
beam spacing

IP65 and IP67

Analogue and  
Digital readings  
2 outputs

Software configuration  
Easy to use with extensive  
configurable parameters choice

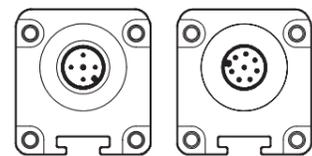
Caps  
Glass reinforced polypropylene

M12 connectors  
Cables easy to source  
and replace

Compact size  
Only 30 x 28 mm

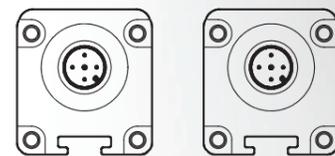
Status indicating display  
Including alignment aids

Models A and B



Emitter  
M12 5-pole      Receiver  
M12 8-pole

Models C and IOL



Emitter  
M12 5-pole      Receiver  
M12 5-pole



# Michron

measurement and automation light curtains...

...for industrial and civil applications

[www.reersafety.com](http://www.reersafety.com)

# Micron



## A unique range

Light curtains for industrial and civil applications where it is necessary to detect, measure, and recognise objects.

Depending on the number and position of the beams engaged by an object, Micron can provide real time information to a PLC or PC in order to: **detect the presence or absence of objects, perform a count, detect a position, detect a shape or a profile, measure dimensions.**

**Models MI AV** equipped with two analog outputs (0/10 VDC) with programmable functions and two programmable digital outputs.

**Models MI AC** equipped with two analog outputs (4/20 mA) with programmable functions and two programmable digital outputs.

**Models MI B** equipped with an RS 485 serial interface with programmable functions and two programmable digital outputs.

**Models MI C** equipped with two antivalent solid state outputs.

**Models MI IOL** equipped with outputs with IO-Link protocol.

MicronConfigurator software for PC, with graphic user interface, is supplied with each light curtain (models A and B only). Models A and B are provided with an M5 4-pole connector for parameter configuration and monitoring of the light curtain. Micron IOL configuration via the IO-Link Master.

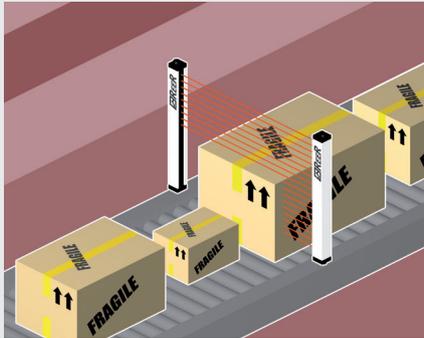
## measurement and automation light curtains

[www.reersafety.com](http://www.reersafety.com)

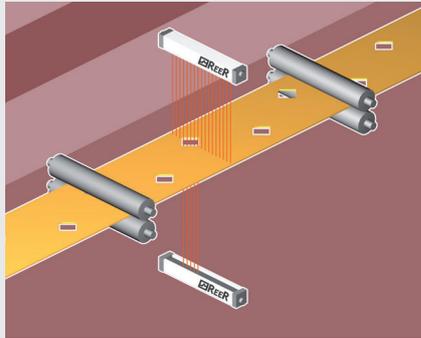
# An extensive and comprehensive range

Unique features allow to deliver optimal results in most

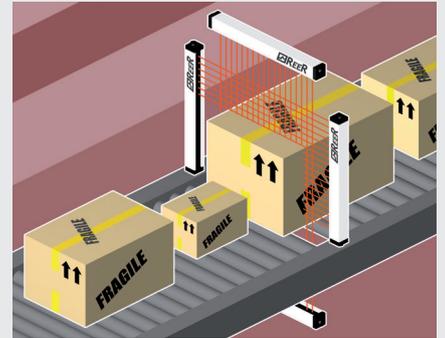
## Typical applications



Measurement of the height of objects in transit on conveyor systems



Quality control: verification of presence, absence or position of holes



Two-dimensional detection of objects in transit on conveyor systems with use of 2 light curtains

### Micron A

Ideal for object measurement and detection of dimensional limits.

AV (0/10 VDC) analogue output, AC (4/20 mA) analogue output.

Solution providing simple measurement with easy interfacing.

### Micron B

Ideal for dimensional measurement, detection of object profile and position.

RS 485 serial line and two solid state outputs 0/24V with programmable functions.

Solution providing complete and detailed information on the status of each beam via the RS 485 serial line and, by means of the two solid state outputs, further on/off information related to the occurrence of the programmed conditions.

### Micron C

Ideal for piece counting and detection of object presence/absence in the controlled field.

Two solid state antivalent outputs 0/24V without the need of programming.

Solution providing simple on/off information related to the status of the controlled area.

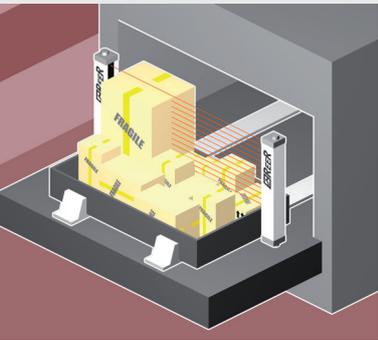
### Micron IOL

Ideal for dimensional measurement, detection of object profile and position.

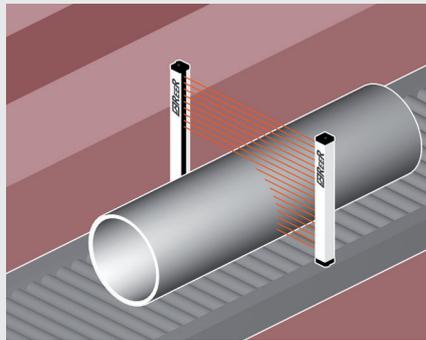
Outputs with IO-Link protocol.

Data available via the IO-Link Process Data Mapping: number of consecutive beams obstructed, number of beams obstructed, central beam obstructed, last beam obstructed, first beam obstructed, curtain status (Free + Sync), object detected and individual beam status.

# Range of measurement and detection light curtains for most applications



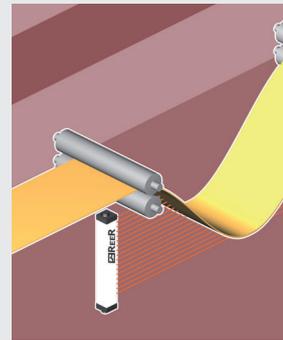
Automatic warehouses: detection of maximum height of the objects sent in the boxes for efficient management of the machine's capacity



Measurement and identification of cylinders of various sizes



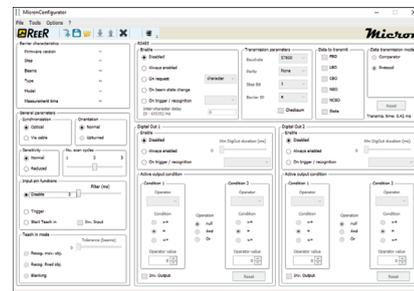
Detection of position and profile of pieces in automatic painting systems



Loop control systems

## Technical features

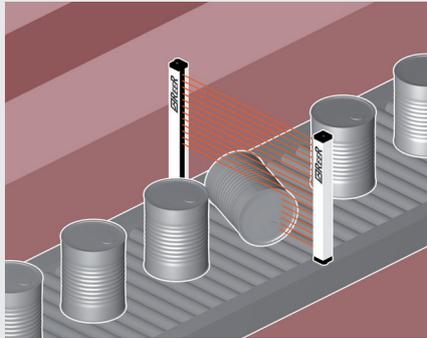
- Controlled heights: 150 ... 3000 mm
- Beam spacing: 5, 10, 25, 30, 50, 75 mm
- Max. range:
  - 2,5 m: 5 mm beam spacing models
  - 10 m: 10, 30 mm beam spacing models
  - 18 m: 25, 50, 75 mm beam spacing models
- Scan cycles: 1, 2, 3 (selectable)
- Synchronisation between emitter and receiver: optical or via cable (selectable)
- Status display for operating status monitoring and light curtain self-diagnosis
- Power supply: 24 VDC +/-20%
- Max. length connection cables between light curtain and interface: 100 m. 20 m between light curtain and master for IOL models
- Operating temperature: -10 ... +55° C
- Protection rating: IP65 and IP67
- Fastening mode: back slot, or to the top and lower end with optional rotating brackets
- Cross-section dimensions: 28 x 30 mm



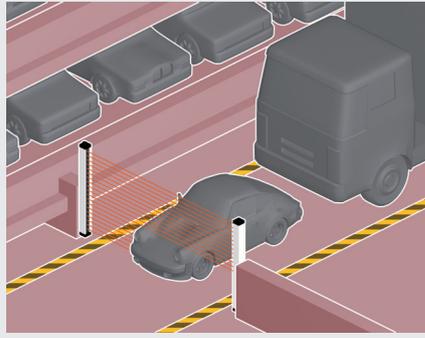
### MicronConfigurator

An extensive and easy-to-use configuration software is included with Micron A and B.

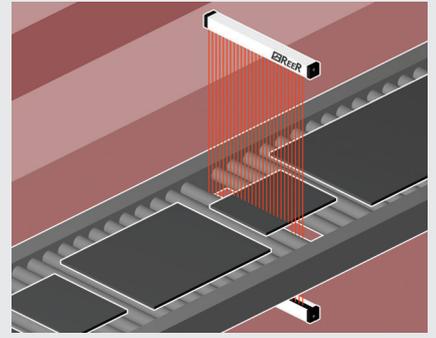
# Light curtains



Quality control: verification of correct positioning of objects

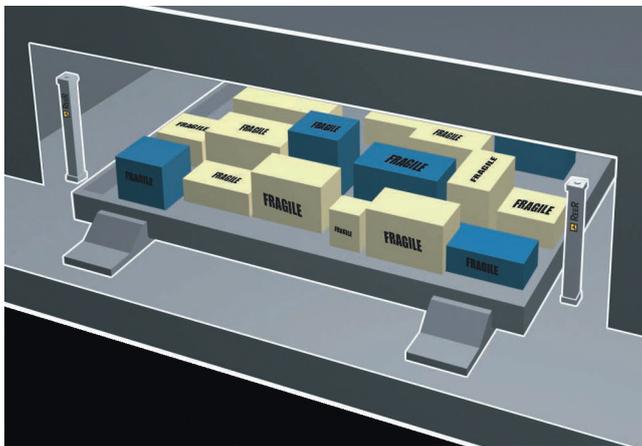


Detection of overall dimensional limits of vehicles for vehicle handling in automatic parking garages



Measurement of the width and position of panels or sheets of material in transit on roller units or conveyor belts

## Special application



Special model with beam spacing: 25, 50, 75 mm.

The special optics of these light curtains allow detection of small objects in quick motion.

This particular application requires to detect the maximum height of the stored goods in order to maximise the system overall capacity.

Small high-speed moving items are detected thanks to a custom developed optic set.

### Vertical warehouse storage systems

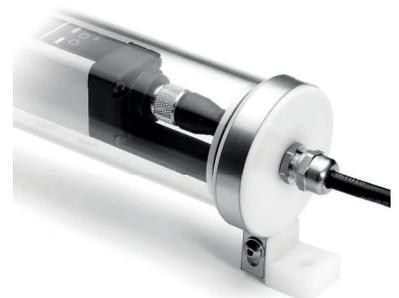
Furthermore, Micron is customised to satisfy the needs of automated warehousing applications, including: **accuracy of the reading in every position of the storing drawer** (left, right or centre positioned), **ability of measuring small dimension objects** (less than 2 mm at 600 mm/sec) particularly during the high-speed transit of the storing drawers in front of the barrier, and **immunity to optical reflections**.

### WTF and WTHF models

Watertight enclosures allow light curtains and light grids to be used in harsh working environments with exposure to water and steam.

The use of inert and non-toxic components allow WTF and WTHF enclosures to be used in the Food & Beverage industry, where frequent washdown procedures are required.

IP69K certified, Ecolab food-graded



**ECOLAB**



*Your future's safe!*

### More than 60 years of quality and innovation

Founded in Turin, Italy in 1959, ReeR distinguished itself for its strong commitment to innovation and technology.

A steady growth throughout the years allowed ReeR to become a point of reference in the safety automation industry at a worldwide level.

The Safety Division is in fact today a world leader in the development and manufacturing of safety optoelectronic sensors and controllers.

ReeR is ISO 9001, ISO 14001 and ISO 45001 certified.



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