REER

Your future's safe!



Micron

measurement and automation light curtains

Short form

1. Aluminum casing powder-coated
2. -10 ... +55° C operating temperature. Ideal also in cold storage facilities
3. Caps - Glass reinforced polypropylene
4. M12 connectors
   Cables easy to source and replace
5. Status indicating display
   Including alignment aids
6. Software configuration. Easy to use with extensive configurable parameters choice
7. Up to 5 mm beam spacing
8. IP65 and IP67
9. Analogue and Digital readings
   2 outputs
10. Compact size
    Only 30 x 28 mm

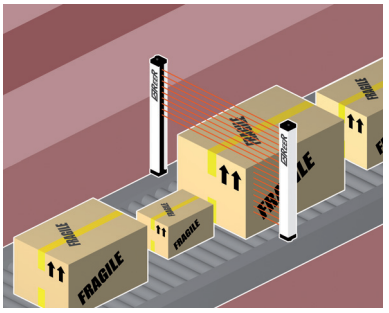


RoHS Compliant

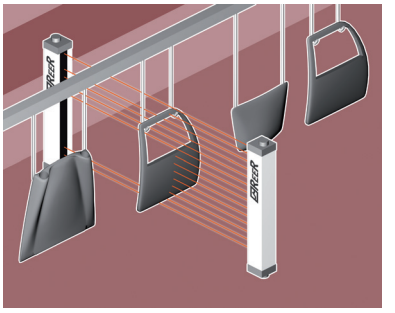
CE

c UL us LISTED

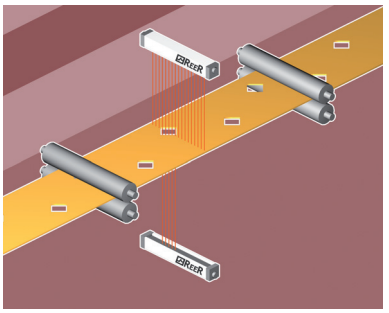




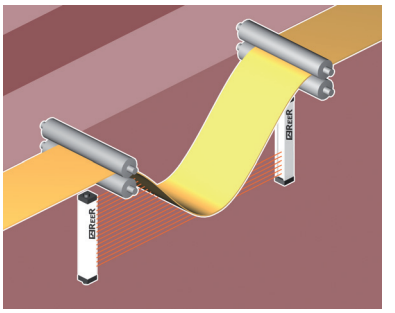
Measurement of the height of objects in transit on conveyor systems



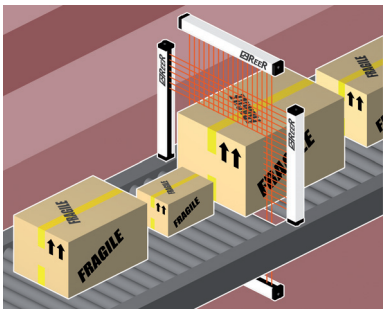
Detection of position and profile of pieces in automatic painting systems



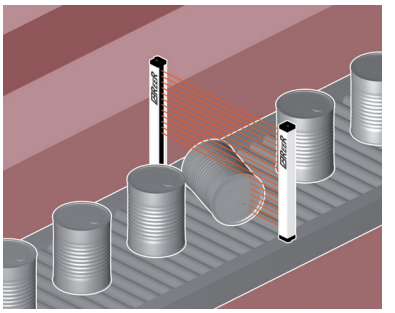
Quality control: verification of presence, absence or position of holes



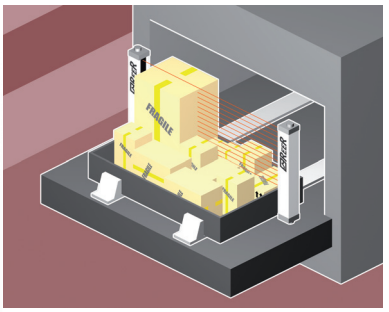
Loop control



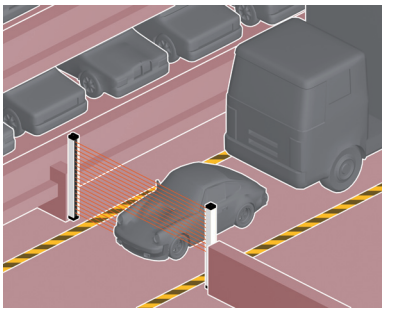
Two-dimensional detection of objects in transit on conveyor systems with use of 2 light curtains



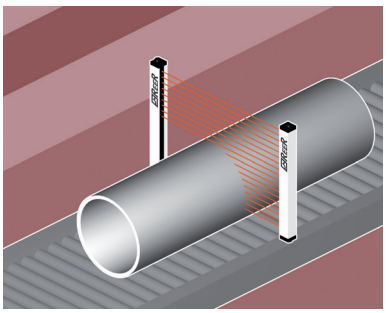
Quality control: verification of correct positioning of objects



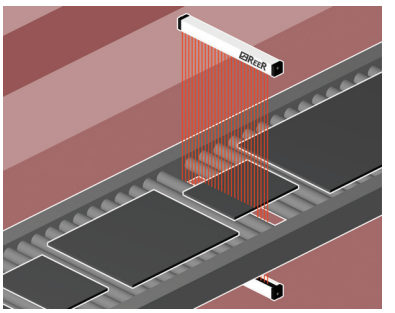
Automatic warehouses: detection of maximum height of the objects present in the boxes for efficient management of the machine's capacity



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



Measurement and identification of cylinders of various sizes



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



Micron

measurement and automation light curtains for industrial and civil applications



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 featuring two programmable analogue outputs (0/10 VDC) and two programmable digital outputs.

Models MI AC featuring two programmable analogue outputs (4/20 mA) and two programmable digital outputs.

Models MI B featuring a programmable RS 485 serial interface and two programmable digital outputs.

Models MI C featuring two antivalent solid state outputs.

Models MI IOL featuring outputs with IO-Link protocol.

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.

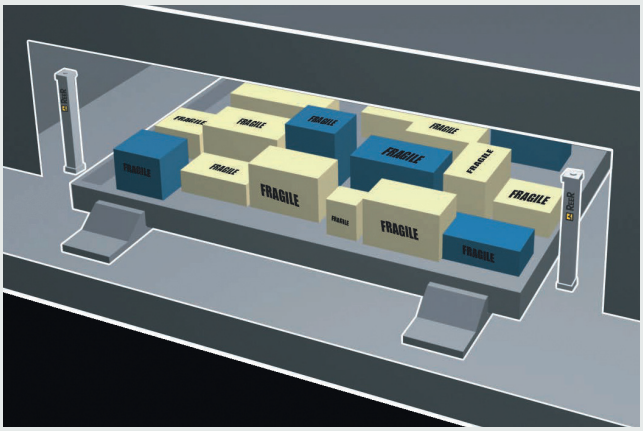
Micron IOL

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

Ouputs 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.

Special application



Vertical warehouse storage systems

Special models 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.

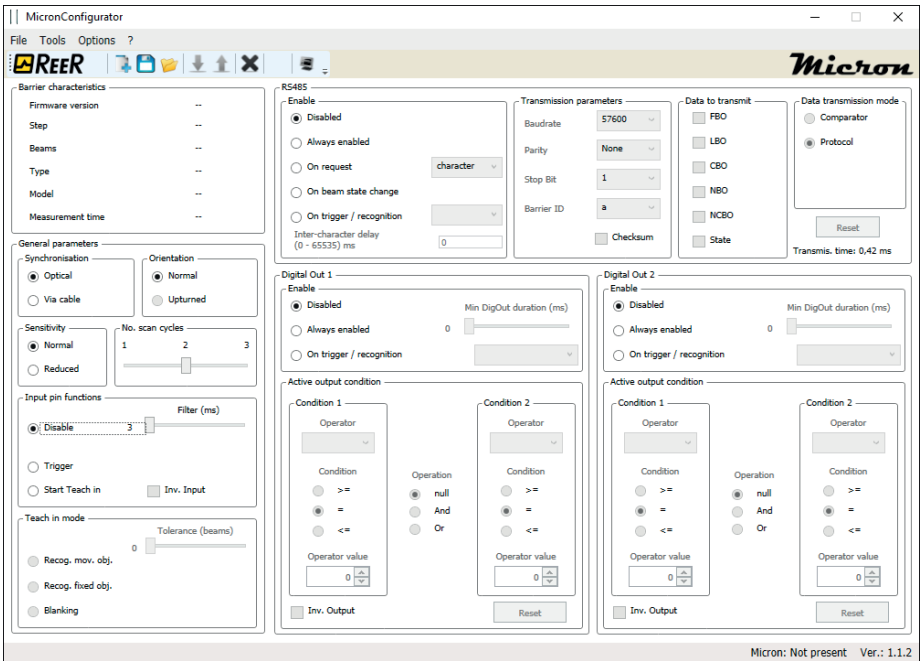
Furthermore, Micron is customised to satisfy the needs of automated warehousing applications, including: **accuracy of the reading in every position of the storing drawer** (left, right or centre positioned), **ability of measuring small dimension objects** (less than 2 mm at 600 mm/sec) particularly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

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%
- Operating temperature: -10 ... +55° C
- Fastening mode: back slot, or to the top and lower end with optional rotating brackets
- Protection rating: IP65 and IP67
- Cross-section dimensions: 28 x 30 mm
- Max. length connection cables between light curtain and interface: 100 m

MicronConfigurator

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



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**.

M5 multi-beam photocell

Through-beam photocell with 5 beams

Ideal for installation as Muting sensor, allows to detect also the most difficult objects like, for example, piles of pallets.

With a compact metal housing and a polycarbonate protective front window, it offers the right degree of robustness ideal also in the most demanding environments.

Provided with pigtail cable with M12 5-pole connector for easy installation.

The integrated status signaling lamp allows to easily verify the status of the system.



Also available in TRX version with retro-reflective Muting sensors

MTRX retro-reflective photocell

Single-beam retro-reflection photocell

Consisting of an Active TX/RX and a Reflector (to be ordered separately)

Two versions available: MTRX and MTRX GLASS with low scanning range to optimise correct and consistent detection of transparent materials (i.e. glass).

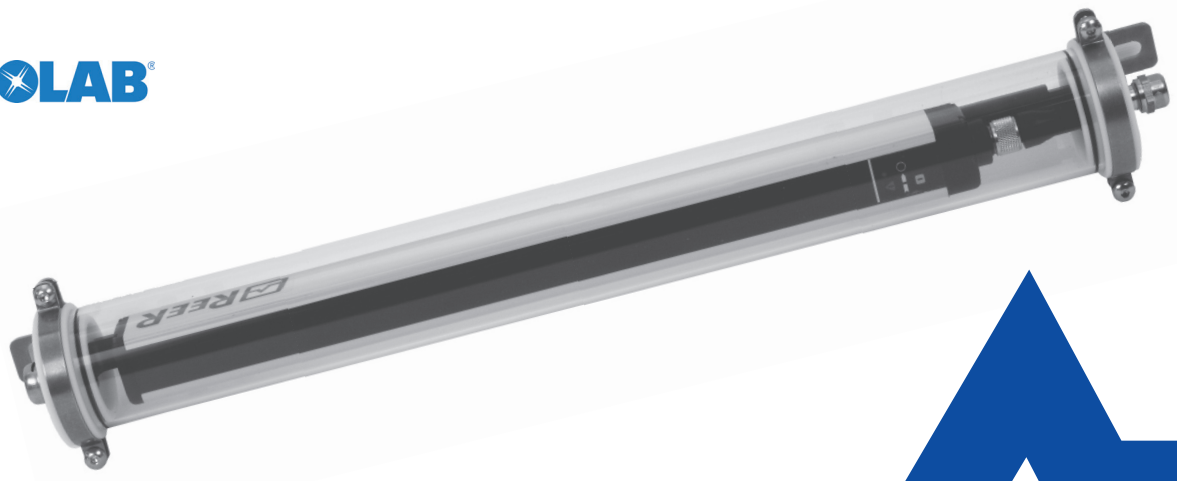
The integrated status lamp allows to easily verify the status of the system.

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.

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.

Made in Italy
since 1959

ReeR SpA
Via Carcano, 32
10153 Torino, Italy

T +39 011 248 2215
F +39 011 859 867

reersafety.com | info@reer.it

MISTO
Carta da fonti gestite in maniera responsabile
FSC® C004467

Edition 4 - Rev. 1.0
November 2023
8946240
Brochure MICRON - English

Printed in Italy

ReeR SpA does not guarantee that product information in this catalogue are the most current available. ReeR SpA reserves the right to make changes to the products described without notice and assumes no liability as a result of their use or application. Our goal is to keep the information on this catalogue timely and accurate, however ReeR SpA accepts no responsibility or liability whatsoever with regard to the information on this catalogue. Reproduction is not authorised, except with the expressed permission of ReeR SpA.