

the **sensor** people

CML 700*i*—

Measuring light curtain with
integrated control unit and interfaces
for even simpler operation



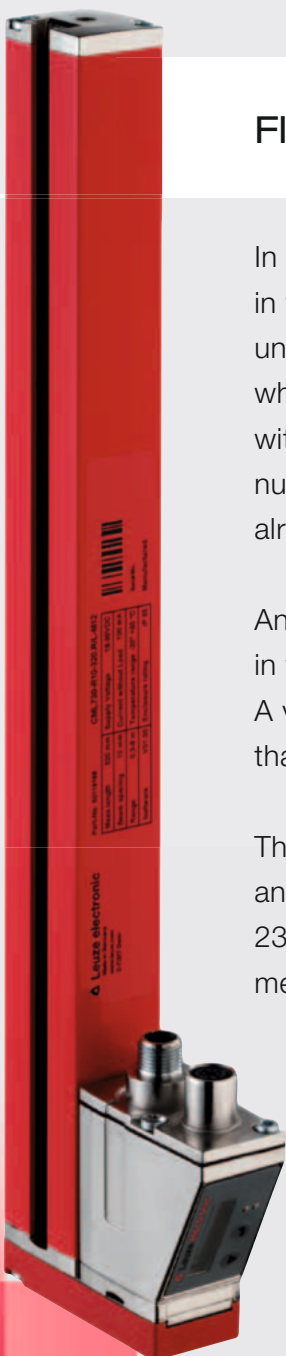
How a **simple idea inspires** an entire product group.

Flexibility inside

In the CML 700i, both the control unit and the interfaces are integrated in the receiver unit—this makes additional devices completely unnecessary. Parameterization is performed directly via the control unit which stores the parameters and allows units to be swapped out without parameterization needing to be carried out again. A large number of interfaces—and now also PROFIBUS and RS485—are already integrated.

An alignment mode and a bar graph display showing the receiving level in the display are integrated to permit fast and reliable alignment. A very short response time of 10 and 30 μ seconds per beam means that extremely fast processes can be detected and measured reliably.

Thanks to the optional plug outlet, the CML 700i can be installed on and in the system very flexibly. The extremely small blind area of 23 mm allows additional CML 700i units to be cascaded for measurement lengths of more than 3 m.



The most important **advantages**
at a glance.



Measurement field length

Maximum measurement field length of nearly 3 m for measurement of large objects.

Fastening

Direct mounting using sliding blocks or comprehensive mounting material.

Large operating range

Operating range of 6 m and 8 m for larger performance reserves.

Integrated interfaces

The connections for direct configuration via the control.



Short cycle times

Response time of 10/30 μ s per beam for the reliable detection of even fast processes.

Robust metal housing

Also for use in rough industrial environments.

Connection

M12 connector for fast installation.

Operational control

Large, easy-to-read display with robust membrane keyboard.



Groundbreaking down to
the **smallest detail.**



Display



- Bar graph display for fast alignment
- Configuration of the interfaces
- Configuration of the switching outputs
- Status display of the beam states and inputs/outputs
- Diagnosis

Easy alignment via bar graph display



CML 720i

CML 730i

Measurement range	0.3–6 m	0.3–8 m
Measurement field length	150–2,960 mm	
Beam distance	5/10/20/40 mm	
Response time / beam	30 µs	10 µs
Voltage	18–30 V DC	
Display	2-line display + LED	
Interfaces	PROFIBUS, RS485, IO-Link, CANopen, ANALOG	
Outputs	Analog current and voltage 4/2 inputs/outputs, configurable	
Connection	M12 connector	
Transparent media	No	Yes

Your success is already included with these functions.

■ Beam stream

Serial output of each individual beam. The data are available via the CANopen fieldbus interface or via IO-Link.

■ Blanking

Suppression of beams that are not included in the evaluation.

■ Web function

Center or edge control of a web via switching outputs; alternatively, a warning message can be output if nominal value limits are exceeded.

■ Grouping

In order to read the beam states with one 16-bit or 32-bit word virtually "all at once", it is possible to assign the beams to up to 32 groups. Each group is then represented as 1 bit.

■ Hold function

This function can be used to hold the measurement value for a specified time until retrieved by the superior control.

■ Cascading

Any number of light curtains with different numbers of beams can be cascaded without mutually interfering with one another. The light curtains can be configured as master/slave.

■ Hole recognition

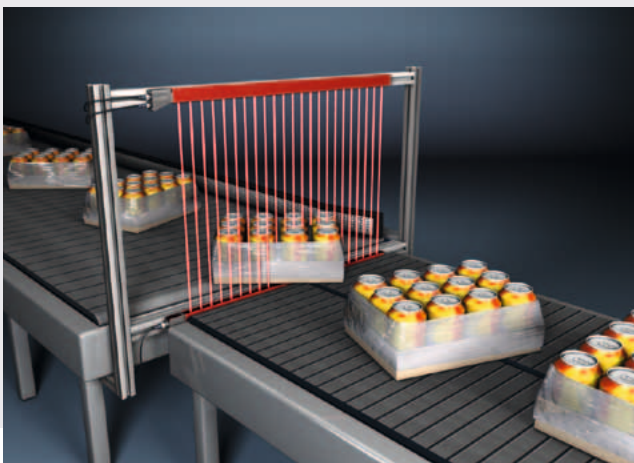
Integrated evaluation logic for detecting holes in a web and for signaling via the switching output.

■ Smoothing

By means of this signal preprocessing, it is possible to only evaluate measurement data if a minimum object size was reached. It is also possible to specify that, within a web, only holes with a minimum size are output.

■ Beam functions

In parallel beam operation, each light beam is detected directly by the mutually opposing receiver. In diagonal beam operation, each light beam is detected alternately by both the directly opposing receiver as well as by the receiver directly adjacent to it. In cross-beam operation, each light beam is alternately detected by both the directly opposing receiver as well as by the two receivers adjacent to it.



The **connection** makes the **difference**.

Who says that the control unit of a light curtain always needs to be arranged axially? With our new, optional cable outlets at the side or rear, entirely new mounting and—above all—cascading options are opened.

Axial connection

With large display for convenient configuration.



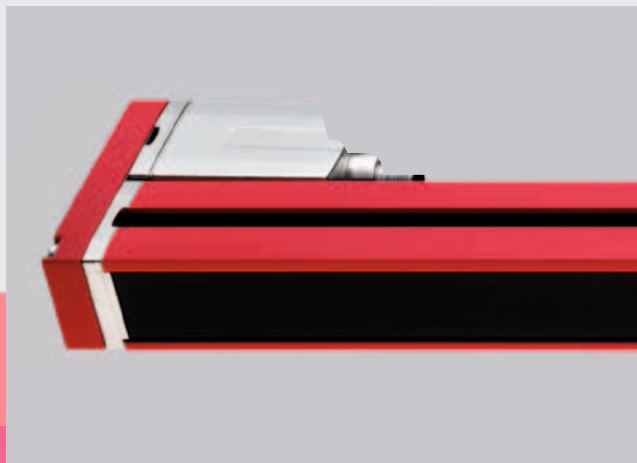
Minimum dead zone

Dead zone of just 23 mm owing to optional cable outlets.



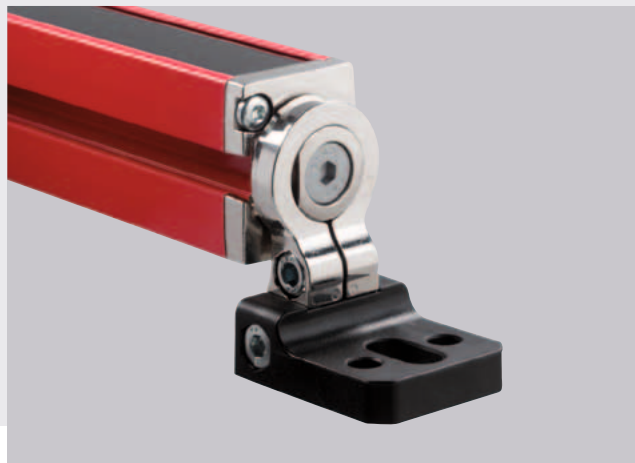
Optional rear connection

Extremely short length for cascading with minimal dead zone.



Optional swivel mount

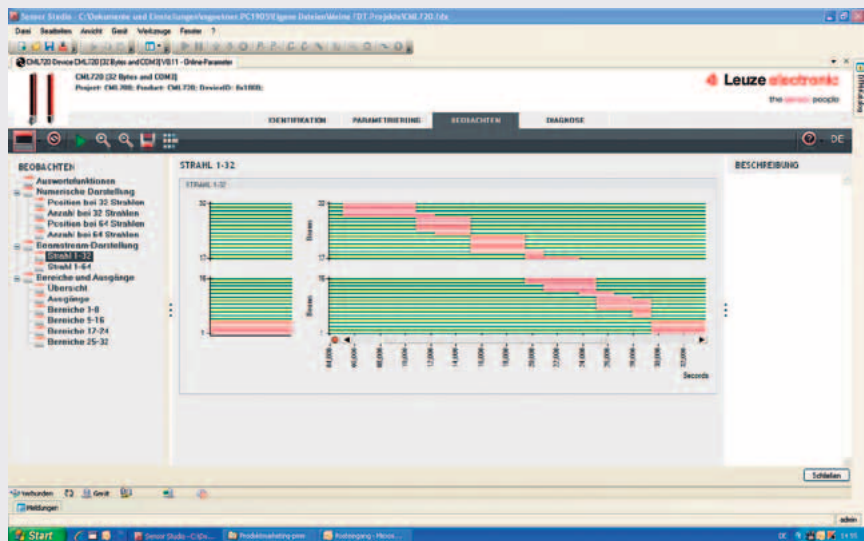
Flexible, 240° swivel mounting for simple and reliable alignment and installation.



Configuration and parameterization made easy.

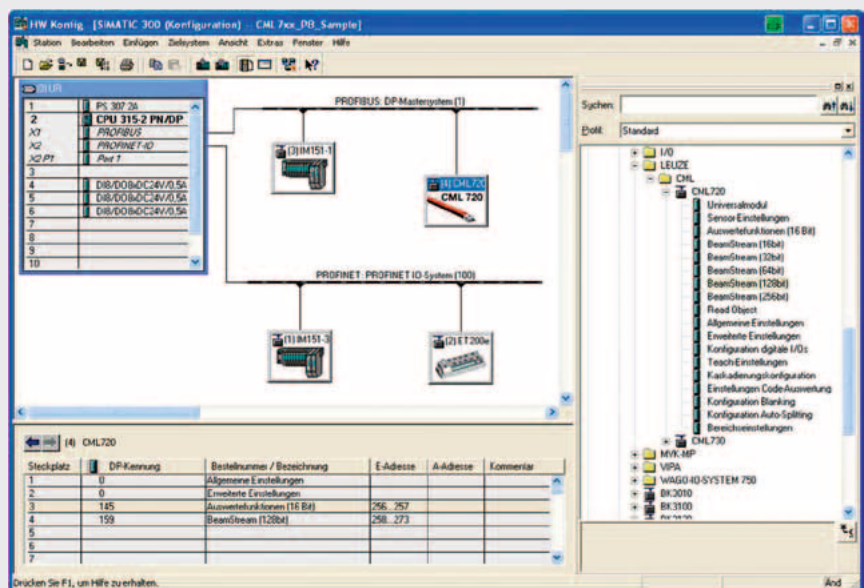
The Leuze electronic Sensor Studio.


The Sensor Studio is a software which allows products which do not operate on a fieldbus to be configured and parameterized extremely simply and conveniently. The parameters are displayed in an easy-to-understand and graphical form.



The CML 700i in the PROFIBUS/PROFINET world.

The integrated PROFIBUS interface allows parameterization to be performed using the GSD file. In addition, the I/O Link master allows simple access to the PROFINET and many other fieldbuses. The set parameters are stored in the control and, if a device is swapped out, the parameters are transferred automatically to the new device.





Switching Sensors

Optical Sensors
Ultrasonic Sensors
Fiber Optic Sensors
Inductive Switches
Forked Sensors
Light Curtains
Special Sensors

Measuring Sensors

Distance Sensors
Sensors for Positioning
3D Sensors
Light Curtains
Forked Sensors

Products for Safety at Work

Optoelectronic Safety Sensors
Safe Locking Devices and Switches
Safe Control Components
Machine Safety Services

Identification

Bar Code Identification
2D-Code Identification
RF Identification

Data Transmission/ Control Components

MA Modular Interfacing Units
Data Transmission
Safe Control Components

Industrial image processing

Light-Section Sensors
Smart Camera

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