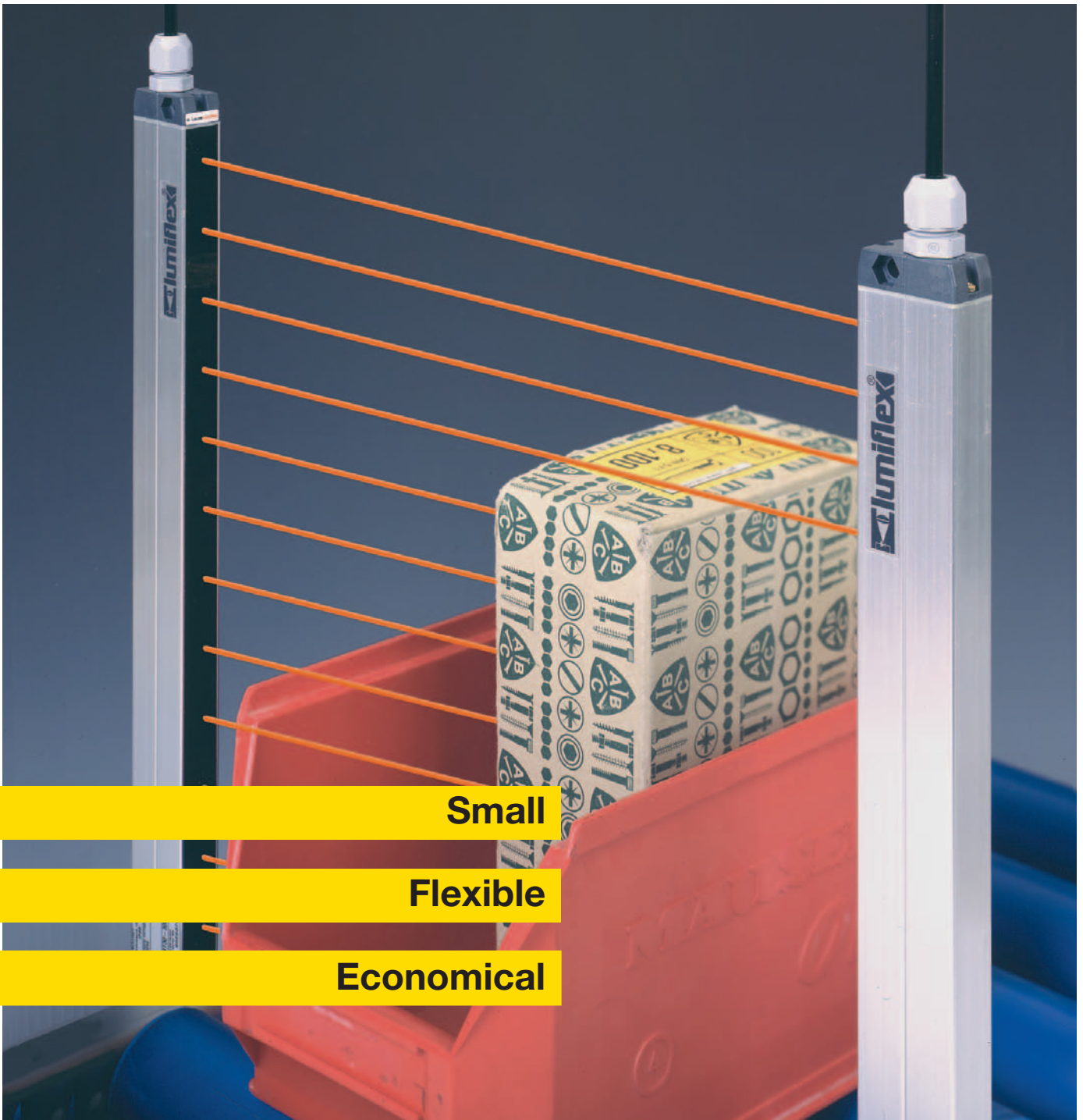




SCAN

Measuring Light Curtain



Small

Flexible

Economical



Overview of SCAN

Optoelectronic measurement technology does not have to be complicated. Consisting of a transmitter and a receiver, SCAN light curtains operate much like a light barrier. Infrared beams projected from the transmitter to the receiver produce a grid-type measurement field.

The status of the individual light axes ("light path unobstructed" or "light path interrupted") is stored in the receiver. These data are then transmitted via serial interface and a PLC driver program directly into the working memory of the connected PLC control, where it can be further processed depending on the requirements of the application. For performing simple detection tasks, the presence of objects in the measurement field is indicated by means of a pnp output.



The advantages

- Measurement field up to 6 m wide, from 900 mm to 3000 mm high
- 30 mm resolution at every position of the measurement field
- Can be connected directly to the PLC control (e.g. Siemens S7-200)
- pnp switch output for measurement field status
- Simple connection due to M12 connector
- Possible to link measurement planes by cascading devices
- Contamination and error signal output to the PLC
- Compact design (17 mm x 33 mm)



Plug and scan

Convenient M12 plug-in connections and the pre-installed driver program allow for a quick start-up. Plug in SCAN, load the driver program, and get started!

Cascading

If measurement is to take place in different geometric planes, SCAN master and slave units can be switched in succession via a plug-in connector cable.

S7-200 Driver Program

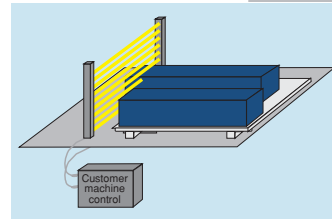
The driver program, available as an accessory, captures the measurement data via Port 0 of the S7-200 control and deposits them in one of the two working buffers. When required driver programs for other PLC controls are available.

SCAN as a Stand-alone Unit

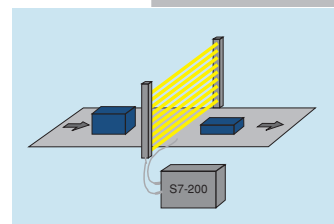
SCAN can independently perform simple detection tasks, such as controlling projection or the presence of an object, with its pnp output "measurement field status".

Application examples

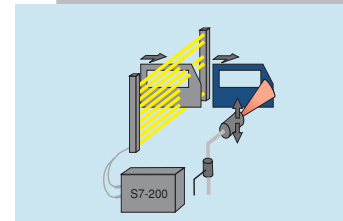
Projection Control



Height Measurement



Contour or Shape Recognition



SCAN technical data

Measurement field height	900, 1050, 1200, 1350, 1500, 1800 mm *)
Measurement field width	0.3 ... 6 m
Resolution	30 mm
Number of light axes	33 - 240 (6 light axes per 150 mm measurement height)
Time required per light axis	200 µs
Enclosure rating	IP 65
Supply voltage	24 V DC +/- 20 %
Current consumption	Transmitter: 75 mA, Receiver: 75 mA
Switch output	Pnp output, short-circuit-proof, 100 mA max.
Contamination/error signal output	Pnp output, short-circuit-proof, 70 mA max.
Data interface/Receiver	RS-485, 19 600 baud
Electrical connection	8-pin round M12 plug-in connector
Dimensions	Cross-section 17 mm x 33 mm, Length (with connector and connecting area) = measurement field height + 96 mm

*) other measurement heights up to 3000 mm upon request