Leuze electronic

the sensor people

SMART
SENSOR
BUSINESS

DDLS 500

Data transmission photoelectric sensor with 100 Mbit/s real-time transmission

*easy*handling.

www.leuze.com

THE DATA IS CARRIED BY LIGHT

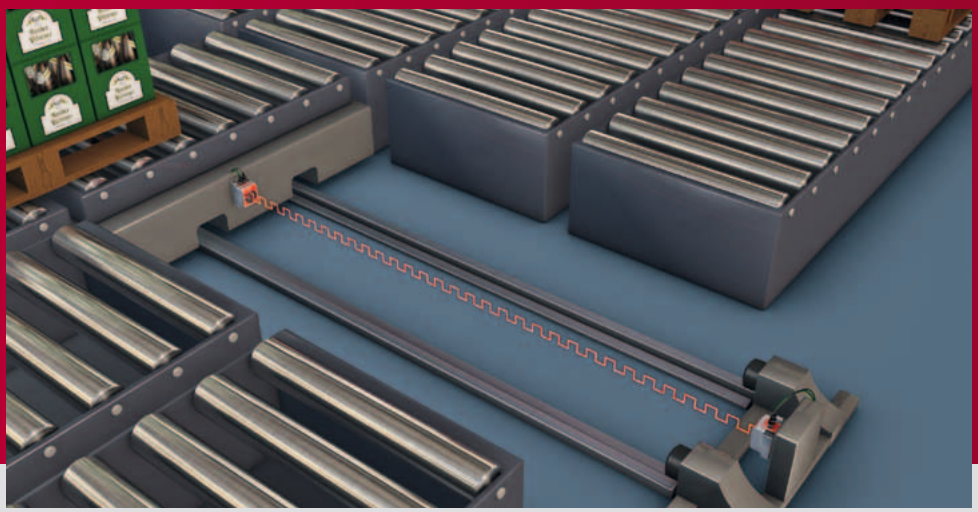
In addition to 100 Mbit/s optical data transmission, the DDLS 500 also offers many other features making it simple and efficient to use.

easyhandling.

MUCH MORE THAN AN "OPTICAL CABLE"

Optical data transceivers are the right choice for any application where data needs to be transmitted without cables and without interference. They enable contact-free and wear-free optical communication wherever mechanical systems are pushed to their technical limitations.

Apart from their basic function — optical data transmission — the DDLS 500 devices offer additional functions that revolutionize and considerably simplify operation, start-up and diagnosis — that is SMARTER PRODUCT USABILITY like only Leuze electronic can offer.



FAST, MODULAR AND ALWAYS IN THE PICTURE

Through the modular basic design, all functions can be flexibly arranged depending on requirements. Thus, the devices do exactly what is needed and thereby offer an optimum price/performance ratio.

With real-time, 100 Mbit/s optical data transmission, all common Ethernet protocols can be transmitted without time delay over a distance of up to 200 m. The DDLS 500 thus supports, e.g., PROFINET, Ethernet IP, EtherCat, Ethernet TCP/IP, Ethernet UDP and many others.

easyhandling.

- Thanks to the patented ***single-hand*** adjustment for one-man alignment, the data light beam can be precisely aligned by just one person
- Convenient laser alignment aid with four laser spots for simple alignment, even over long distances
- An integrated attachment plate with alignment screws makes both mounting and fine adjustment extremely easy
- Clear indication of the receiving level simplifies maintenance and diagnosis
- Clearly visible status LED allows operation of the device to be monitored even from a great distance

thinkmodular.

All of the necessary functions can be combined modularly with the base model. For example, any of the following functions can be selected

- Heating
- Distances
- Laser alignment aid
- Operating ranges

availabilitycontrol.

Constant monitoring of the receiving level means that the user can be alerted to an impending failure (e.g. as a result of excessive soiling) in good time. The prefailure message is also available as a signal on a switching output.
To permit fast visual control, the DDLS 500 also has a LED display that is clearly visible even from a distance of 200 m. All relevant information is precisely depicted in the control panel.

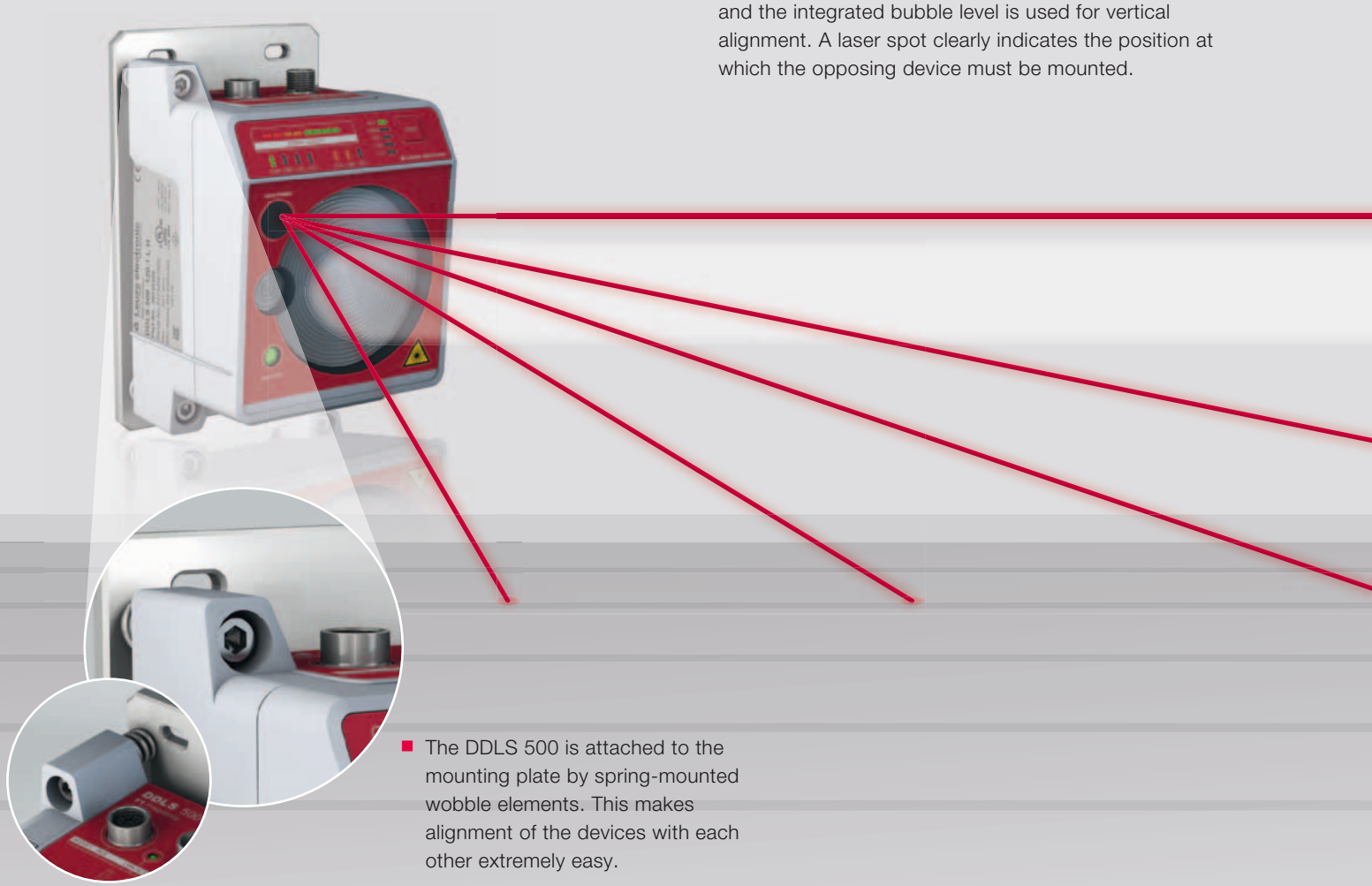
A RED LIGHT SHOWS TH

The integrated laser alignment aid and the tried-and-tested mounting principle make handling extremely easy.

MOUNTING AND ALIGNMENT WERE NEVER EASIER

The integrated mounting plate allows uncomplicated alignment of the DDLS 500.

- To permit mounting at small distances, the housing has been designed in such a way that a straightedge can be positioned on the device to allow alignment.
- To permit mounting at greater distances, four laser spots are projected downward parallel to the optical axis. They are used for horizontal alignment of the DDLS 500 and the integrated bubble level is used for vertical alignment. A laser spot clearly indicates the position at which the opposing device must be mounted.



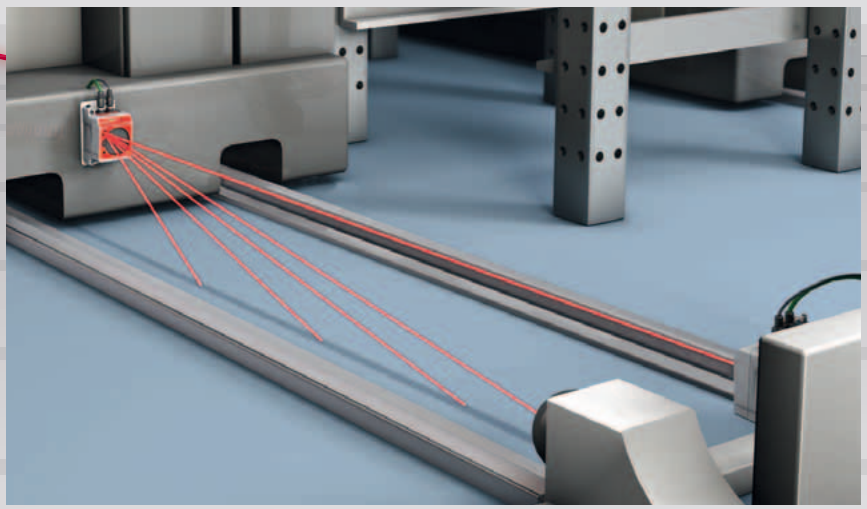
- The DDLS 500 is attached to the mounting plate by spring-mounted wobble elements. This makes alignment of the devices with each other extremely easy.

E WAY

- Integrated bubble level for simple horizontal alignment of the device.

- The actual data transmission takes place via an invisible, infrared laser that communicates bidirectionally.

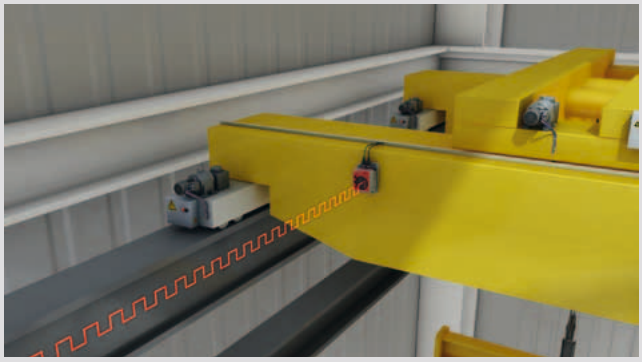
- The four clearly visible spots of the laser alignment aid make alignment very easy and intuitive even over a long distance.



THESE FIGURES SPEAK FOR THEMSELVES

The performance data of the DDLS 500 data transmission photo-electric sensor opens up an extremely flexible range of applications.

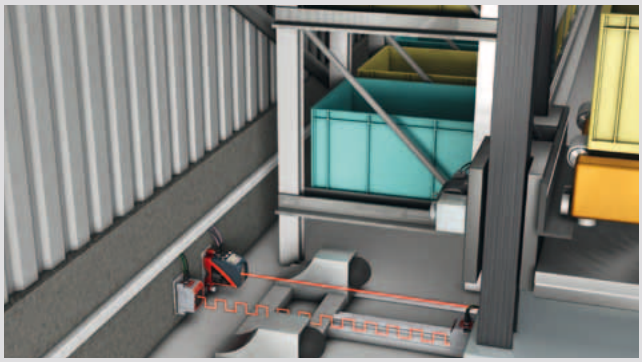
	DDLS 508
Electrical data	
Supply voltage	18…30 CVD
Power consumption without heater	200 mA (at 24 V)
Power consumption with heater	800 mA (at 24 V)
Optical data	
Opening angle	± 0.5 degree
Operating ranges	40 / 120 / 200 m
Light source: transmitter / alignment laser	Infrared / red
Interfaces	
Transparent transmission of all Ethernet protocols Transmission rate: 100 Mbit/s	e.g. Ethernet TCI/IP and UDP, Profinet RT, EtherCat, Ethernet IP, webcams, …
Mechanical data	
Degree of protection	IP 65
Weight	1.2 kg
Environmental data	
Operating temperature: Without heater With heating	 -5 – 50 °C -35 – 50 °C



With operating ranges up to 200 m, the DDLS 500 is also ideal for large installations

Simple alignment of the DDLS 500 over short distances using an alignment straightedge

Optical data transceivers are immune to a wide range of different interference



No interference between the DDLS 500 and AMS 300i distance measurement system

OUR PROMISE TO YOU

SMARTER **PRODUCT USABILITY**

With regard to our product developments, we systematically place emphasis on the especially good usability of all devices. To this end, simple mounting and alignment are taken into account — just as the uncomplicated integrability of the sensors in existing fieldbus systems and easy configuration, e.g. via a web browser, are.

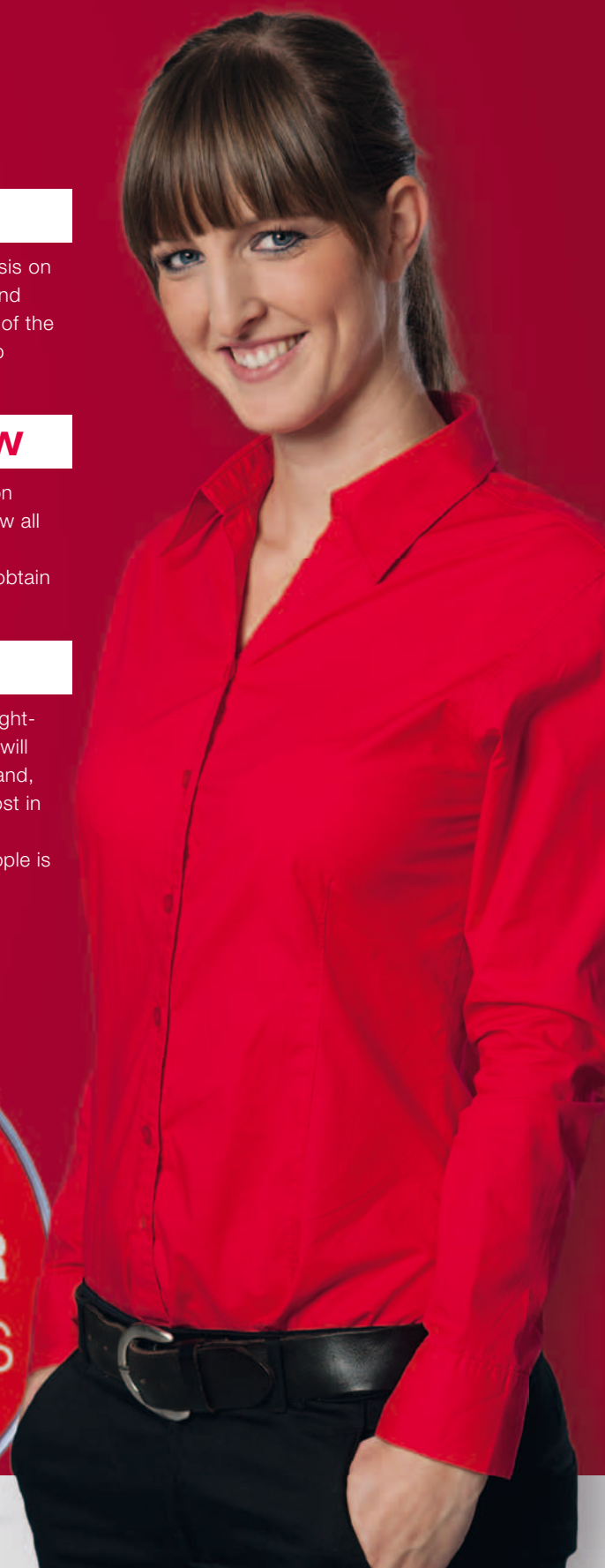
SMARTER **APPLICATION KNOW-HOW**

Whoever can do it all, can do nothing right. Which is why we concentrate on selected target sectors and applications. There, we are specialists and know all aspects inside out. For this purpose, we optimize our solutions and offer a comprehensive product range that makes it possible for our customers to obtain the absolute best solutions from a single source.

SMARTER **CUSTOMER SERVICE**

The technical and personal closeness to our customers, and a skilled, straightforward handling of queries and problems, are among our strengths — and will remain so. Consequently, we will continue to expand our service offerings and, indeed, also forge ahead in new directions to persistently redefine the utmost in customer service. Whether on the phone, in the Internet or on-site with our customers — regardless of when and where the expertise of the sensor people is needed at any time.

Info at: **www.leuze.com**



Katrin Rieker,
Employee in the
Customer Care Center

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, Switches and Proximity Sensors
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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Subject to modifications and errors