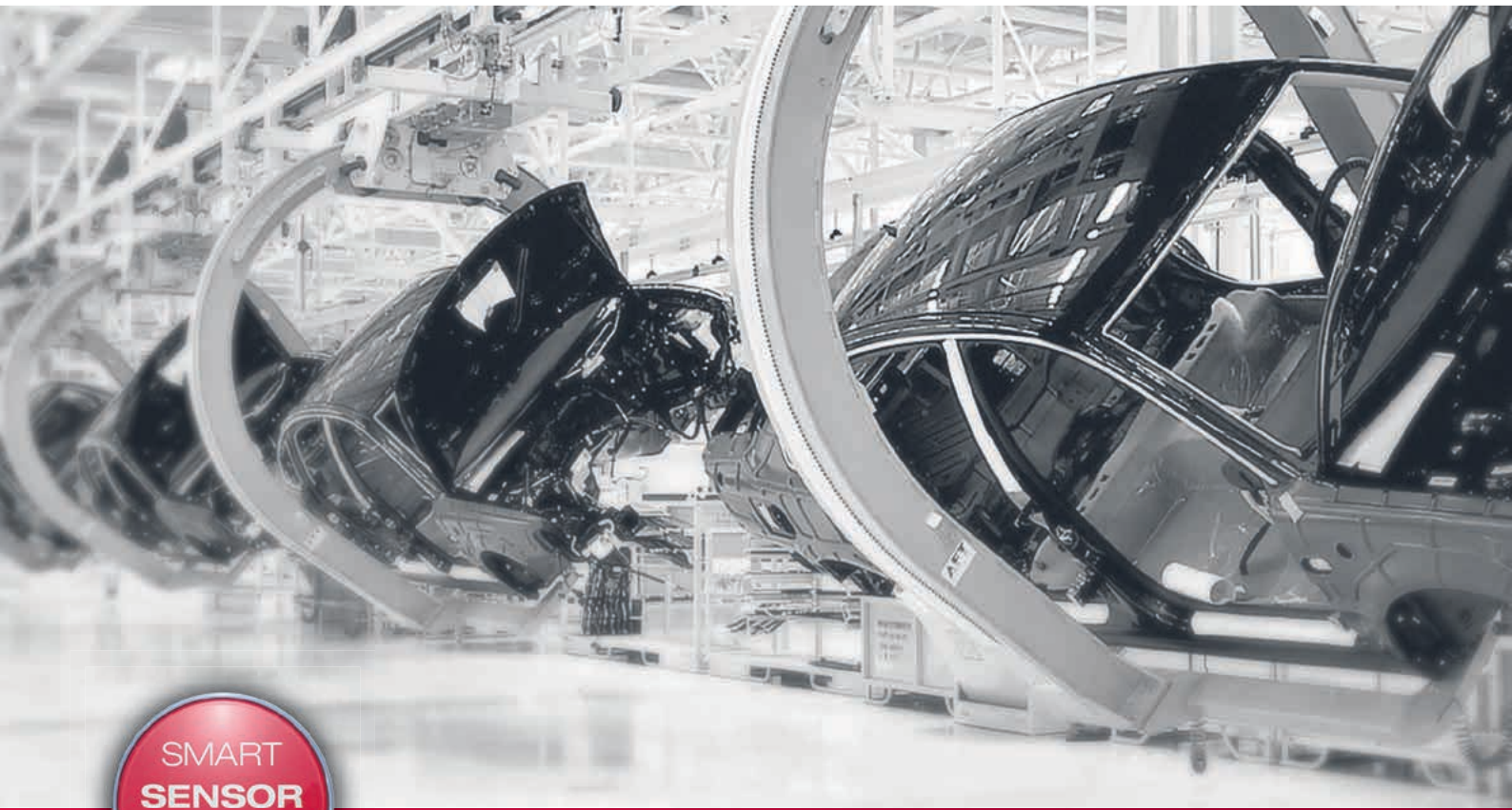
Leuze electronic

the sensor people



SMART
SENSOR
BUSINESS

BAR CODE POSITIONING SYSTEM

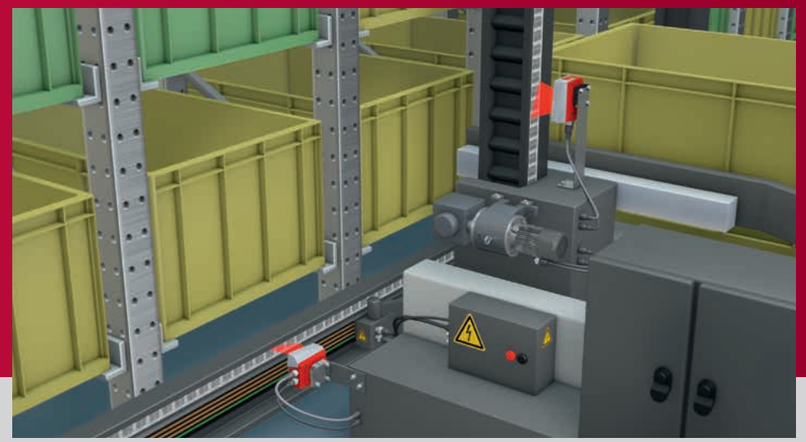
For positioning with millimeter accuracy over distances of up to 10 km

www.leuze.com

ПРОМЭЛЕКТРОНИКА / sales@prom-elec.com

BAR CODE POSITIONING – SECOND GENERATION

The next generation of the BPS 300i bar code positioning system sets standards in performance and handling.



*availability*control.

BAR CODE POSITIONING WAS NEVER THIS GOOD

Ten years of practical experience has been incorporated in the second generation of our bar code positioning systems. The result is a product that sets standards both in performance characteristics as well as in ease of handling. Mounting and operation are now even simpler, faster and more reliable.

THE WHOLE IS MORE THAN THE SUM OF ITS PARTS

Your benefit lies in the combination of the many advantages offered by the BPS 300i systems. What they all have in common is the focus on simple usability with maximum possible performance reserves for fault-free operation of the devices. Highly resistant bar code tape, available in lengths of up to 10 km, facilitates precise and continuous position determination, even over extremely long distances.

*think*modular.

Find the function range that is optimum for your application and pay only for what you really need.

- **Various connection hoods**
  (terminals, M12, cables) for optimum integration in your control.

Hoods with integrated connectors

MS 3xx
M12 connection

MK 3xx
Connection with terminal hood

- **Optional display**
  for visualization and diagnostics.
- **Optional optics heating**
  for low-temperature applications.

*power*reserve.

Thanks to a working range of ±60 mm, the systems, with their laser technology, are very tolerant of mechanical fluctuations. They thereby offer reliable position detection with the largest performance reserve in every environment.

*availability*control.

With the integrated availabilitycontrol functionality, the device constantly reports its function reserves, thereby indicating, e.g., soiling in good time.
As a result, soiling-related failures can be reliably avoided, since the system can be cleaned in good time.

*integrated*connectivity.

The integrated fieldbus permits complete configuration of the devices directly via the control. You thereby save time during installation and money by avoiding otherwise needed connector units. Should device replacement be necessary, no configuration needs to be performed, since the information is located in the control.

*easy*handling.

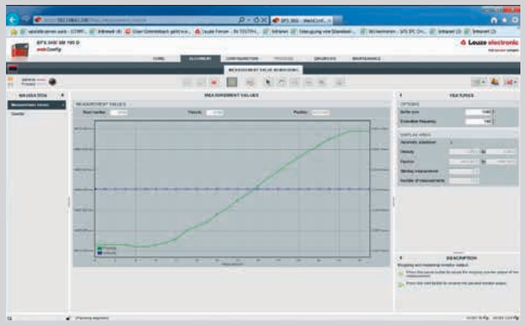
The sophisticated fastening concept enables simple and robust mounting of the devices.
This saves time and prevents difficulties during commissioning. Should replacement be necessary, the devices can be exchanged position-neutral, i.e., without realigning.

BTU 0300 M-W

CONFIGURE – PARAMETERIZE – DIAGNOSE

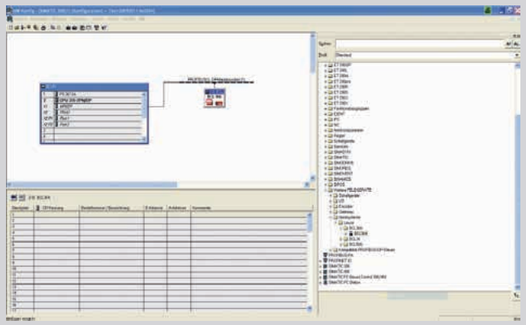
The integrated fieldbus in the BPS 300i makes configuration quick and easy.

*integrated*connectivity.



THE LEUZE ELECTRONIC webCONFIG TOOL

With the integrated webConfig tool, an operating-system independent, web-technology based, multi-language user interface is available for configuring the device. The individual parameters are presented in an easy-to-understand, graphic form.



THE BPS 300*i* IN THE PROFINET WORLD

With the integrated PROFINET, it is possible to configure the BPS 300i via the module structure contained in the GSD / GSDML file directly via the HW Config. In doing so, the parameters that are set are stored in the control and, should a device need to be replaced, are automatically transferred to the new device.

EXACT POSITION DETERMINATION CAN BE THIS COMPACT

The BPS 8 convinces with its large working range and a compact design.

*RS*232 *RS*485

POWER IS NOT A QUESTION OF SIZE

Our compact BPS 8 bar code positioning system requires little space and, thanks to its large working range, is able to compensate for mechanical fluctuations reliably. It convinces with simple mounting mechanics and a standardized M12 plug connection.

The RS 232 or RS 485 interface allows the system to be incorporated in your system architecture without problem.

The BPS 8 is available either with front beam exit or with a deflecting mirror.

For positioning high-bay storage devices and lifting units, e.g., in conveyor and storage systems

For position determination of skillet systems and side-tracking skates, e.g., in the automotive industry

ПРОМЭЛЕКТРОНИКА / sales@prom-elec.com

ALWAYS KNOW WHERE YOU'RE STANDING

Two high-tech solutions for your positioning tasks.

Technical data	BPS 300i	BPS 8
Working range	50 – 170 mm	80 – 140 mm, Beam exit at the front 60 – 120 mm, Angled beam exit
Reproducibility	± 0.15 mm	± 1(2) mm
Measurement value output	1 ms (1,000 values/s)	3.3 ms (300 values/s)
Integration time	8 ms	26.6 (13.3) ms
Max. traverse rate	10 ms	4 ms
Integrated interfaces	PROFINET, PROFIBUS, SSI, RS 485, RS 232	RS 232, RS 485 via MA 8-01
Supply voltage	10 – 30 V DC	4.9 – 5.4 V DC, direct connection 10 – 30 V DC, via MA 8-01
Ambient temperature (operation) without heating with heating	-5 to +50 °C -35 to +50 °C	0 °C to +40 °C

For position determination of telpher lines, e.g., in the automotive industry

For position determination of gantry cranes in intralogistics

ONLY THE RIGHT BAR CODE TAPE MAKES A POSITIONING SYSTEM PERFECT – FLEXIBLE IN LENGTH AND HEIGHT

The second fundamental element of a Leuze electronic bar code positioning system is the bar code tape. The photo-setting technique is used to print a unique bar code at regular intervals on a self-adhesive and highly flexible plastic tape. This technology makes the tape UV resistant, extremely resilient and mechanically durable. The position value is also printed in "plain text" to simplify handling. This tape, which may be up to 10,000 m in length, can be simply affixed to the travel path and conforms well to both horizontal as well as vertical curves. From a length of 150 m, it is possible to adapt the length and height of the tape individually to the application. If the tape should nevertheless be damaged, an appropriate repair kit can be downloaded from the Internet. By integrating so-called mark labels in the bar code tape, the bar code reader can also control specific functions such as velocity changes or conveyor movements.

Technical data	BCB / BCB 8
Max. length	10,000 m
Temperature range	-40 – +120 °C
Print method	Photosetting
Adhesive	Acrylic glue
Tape height	47 mm
Spacing between bar codes	40 mm / 30 mm
Environmental conditions	Scratch and wipe resistant, UV-light resistant, moisture and chemical resistant

MOUNTED QUICKLY AND SECURELY

Our *easy*handling claim starts with mounting and alignment.

ACCESSORIES AND MOUNTING SYSTEMS

In order to mount and connect the bar code positioning system quickly and securely, we have developed matching accessories for various installation situations.

Gateway for integration in all major fieldbuses

Mounting plate for BPS 300i

M12 connection for BPS 300i

Clamp connection for BPS 300i

Space-saving pigtail model for M12 or RJ45 connection

RS 232 / 485 interface and 24 V supply

Connection cable for RS 232/485 and SSI interface

Mounting bracket for the BPS 8 to ensure correct mounting at the correct angle to the tape

Shielded connection cable for BPS 8

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 field bus systems and easy configuration, e.g. via a web browser, are.

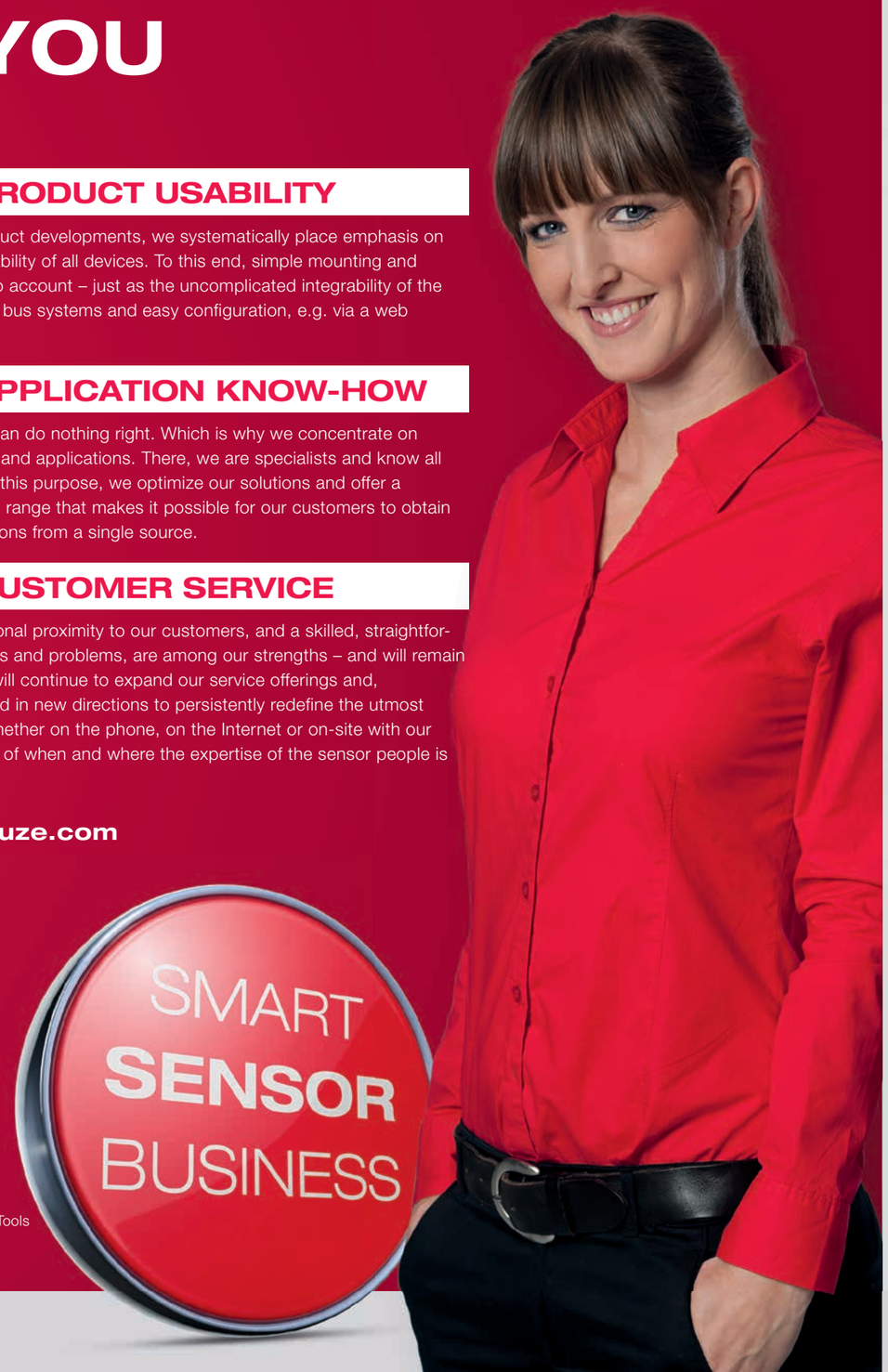
SMARTER **APPLICATION KNOW-HOW**

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 proximity 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, on 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,
Sales Methods, Processes, Tools

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 connection units
Data Transmission
Safe Control Components
Signaling Devices
Connection technology and passive distribution boxes

Industrial image processing
Light section sensors
Smart Camera

Leuze electronic GmbH + Co. KG
In der Braike 1
73277 Owen / Germany
Phone +49 7021 573-0
Fax +49 7021 573-199
info@leuze.de
www.leuze.com

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Subject to modifications and errors