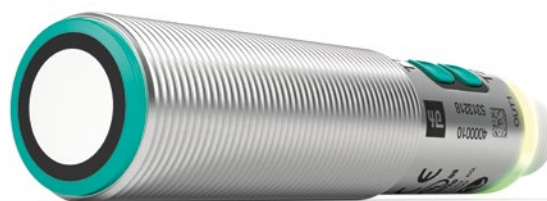


**Building on experience.  
Driving technology.  
Maximizing performance.**

Ultrasonic Sensor  
Series UC18GS with IO-Link



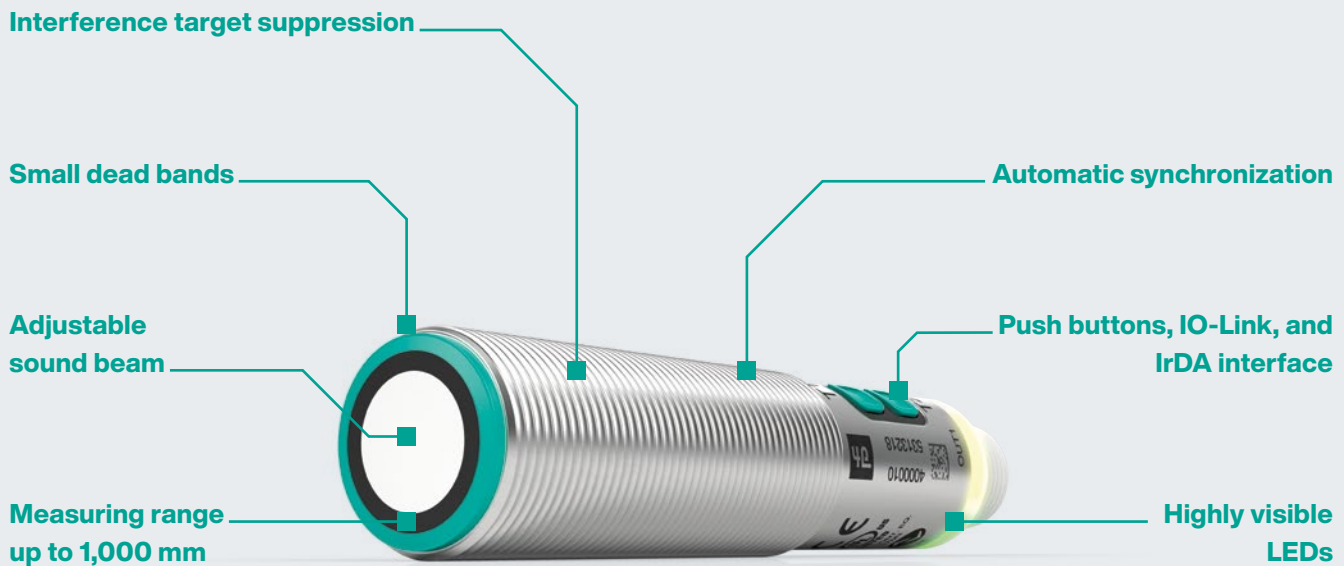
**PEPPERL+FUCHS**



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# Using Technology to Its Fullest Potential



The new ultrasonic sensor series from Pepperl+Fuchs combines the advantages of ultrasonic technology with powerful features to create a sensor solution that meets virtually any application challenge.

## Broad range of applications solved in one compact sensor

Use the possibilities that technology offers today to optimize your application solution. With functionalities like interference target suppression, adjustable sound beam width, automatic synchronization, very small dead bands, IO-Link, infrared interface, and push buttons, the UC18GS series offers an unparalleled range of features and adjustment options—in a single device. This opens up a maximum of flexibility.

## Highlights

- **Versatility:** Broad range of applications solved in one compact sensor
- **Reliable processes:** Interference target suppression for consistent measurement values
- **Individual modification:** Adjustable sound beam for rapid adaption to the application—without losing range
- **Fault-free operation:** Automatic sensor synchronization when using several sensors in tight spaces
- **Flexible commissioning:** Convenient programming and parameterization via pushbuttons, IrDA interface, or IO-Link (DTM/PACTware)

## Flexible and Future-Proof

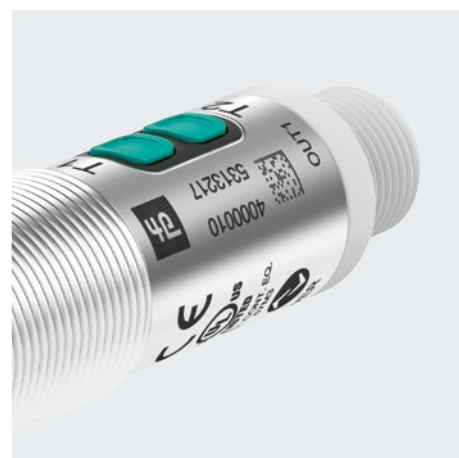
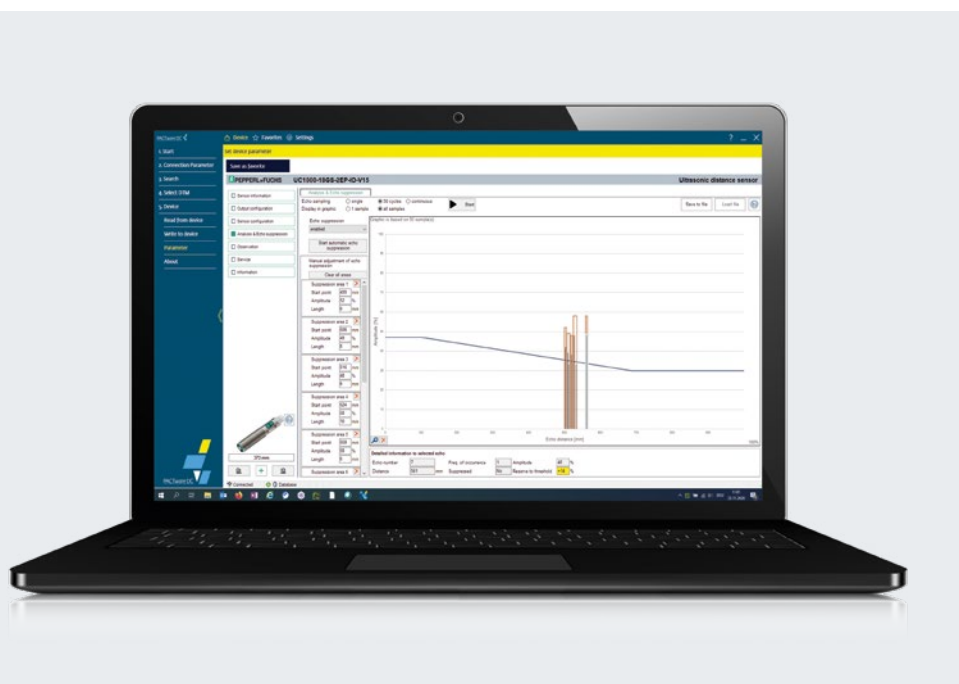
Convenient programming and parameterization of the UC18GS sensor via push buttons, infrared interface, or IO-Link allow highest flexibility during commissioning. Output configuration or adjustment to the sound beam width is done easily via the push buttons directly on the sensor.

The IrDA infrared interface allows direct access to sensor data during a running IO-Link operation—ideal for analysis and maintenance purposes without affecting the IO-Link application. Using the IO-Link interface, the sensor can be comprehensively configured via DTM/PACTware.

In addition, the IO-Link interface allows a seamless integration into Industry 4.0 applications to make your automation future-proof.

### Excerpt of Technical Data

<b>Model number</b>	UC500-18GS-2EP-IO-V15 UC500-18GS-IUEP-IO-V15	UC1000-18GS-2EP-IO-V15 UC1000-18GS-IUEP-IO-V15
<b>Sensing range</b>	30 ... 500 mm	70 ... 1000 mm
<b>Interface 1</b>	IO-Link 1.1	
<b>Interface 2</b>	IrDA (infrared interface)	
<b>Outputs</b>	2× push-pull switching output; or 1× push-pull switching output and 1× analog output (current/voltage)	
<b>Temperature range</b>	-25 ... +70 °C	
<b>Connectors</b>	Connector plug M12 × 1.5 pin	
<b>Degree of protection</b>	IP67	



The ultrasonic sensors are easily adjusted via the push buttons directly on the device or conveniently via DTM/PACTware.

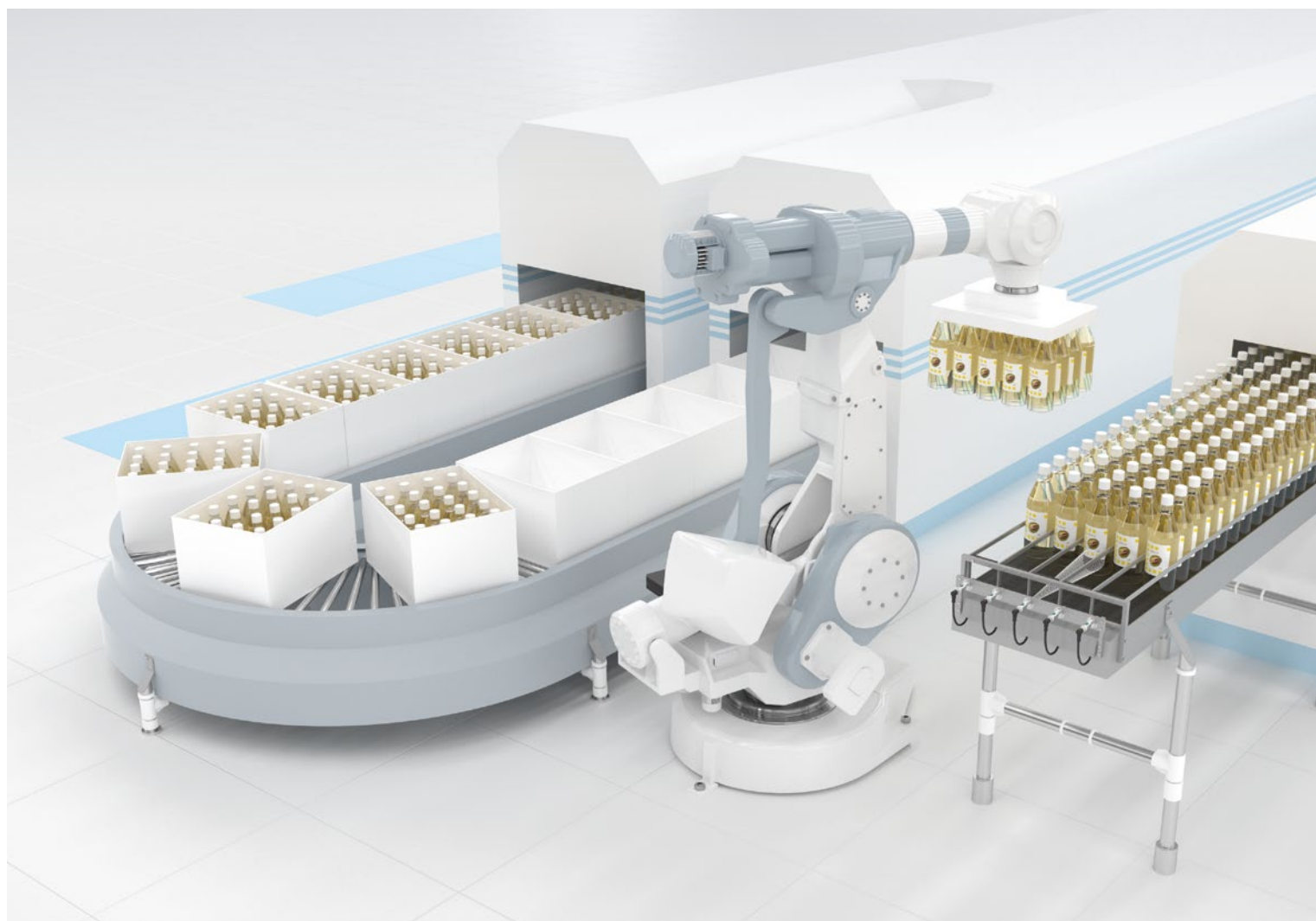
# One Technology—Limitless Versatility

No two applications are the same—each one places unique demands on a sensor. Designed upon a highly robust technology, the UC18GS is ideally suited for complex tasks in the detection and identification of objects or filling levels—regardless of the environment.

## Fault-Free Operation

When several sensors are used together in tight spaces, they can interfere with each other. To correct this, different operating modes are available. The series offers common, multiplex, or externally triggered modes. The sensors are synchronized automatically and without parameterization. Up to ten sensors can be connected to each other via their synchronization input.

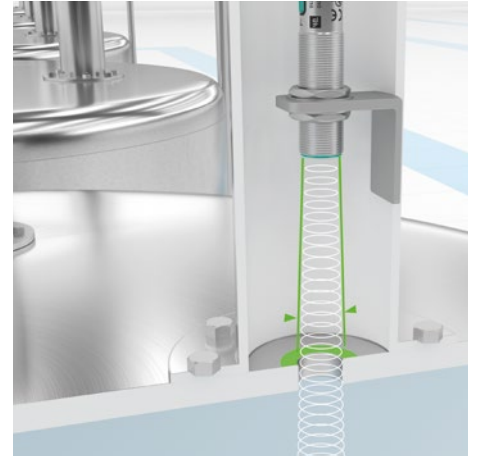
In common mode, all sensors transmit at the same time and analyze all received echoes. When synchronized in multiplex mode, the sensors send alternating signals and analyze their own echo. In each scenario, maximum functional reliability is ensured.



## Individual Modification

The small dead band and the adjustable sound beam width of the UC18GS ultrasonic sensors allow fault-free operation in a wide variety of possible applications.

The sound beam can be adjusted without loss of range. If objects are causing interference—like the interior of a tank or other machine parts—the sound signal can be narrowed. This means no expensive equipment changes and makes the sensor ideal for confined spaces.



## Reliable Processes

Interference echoes from machine parts can easily be suppressed without affecting the measurement. Target distances (e.g. liquid levels) are precisely detected even in the suppressed range. For example, it is possible to suppress a component in a container such as the supporting struts and still perform a reliable distance measurement.

