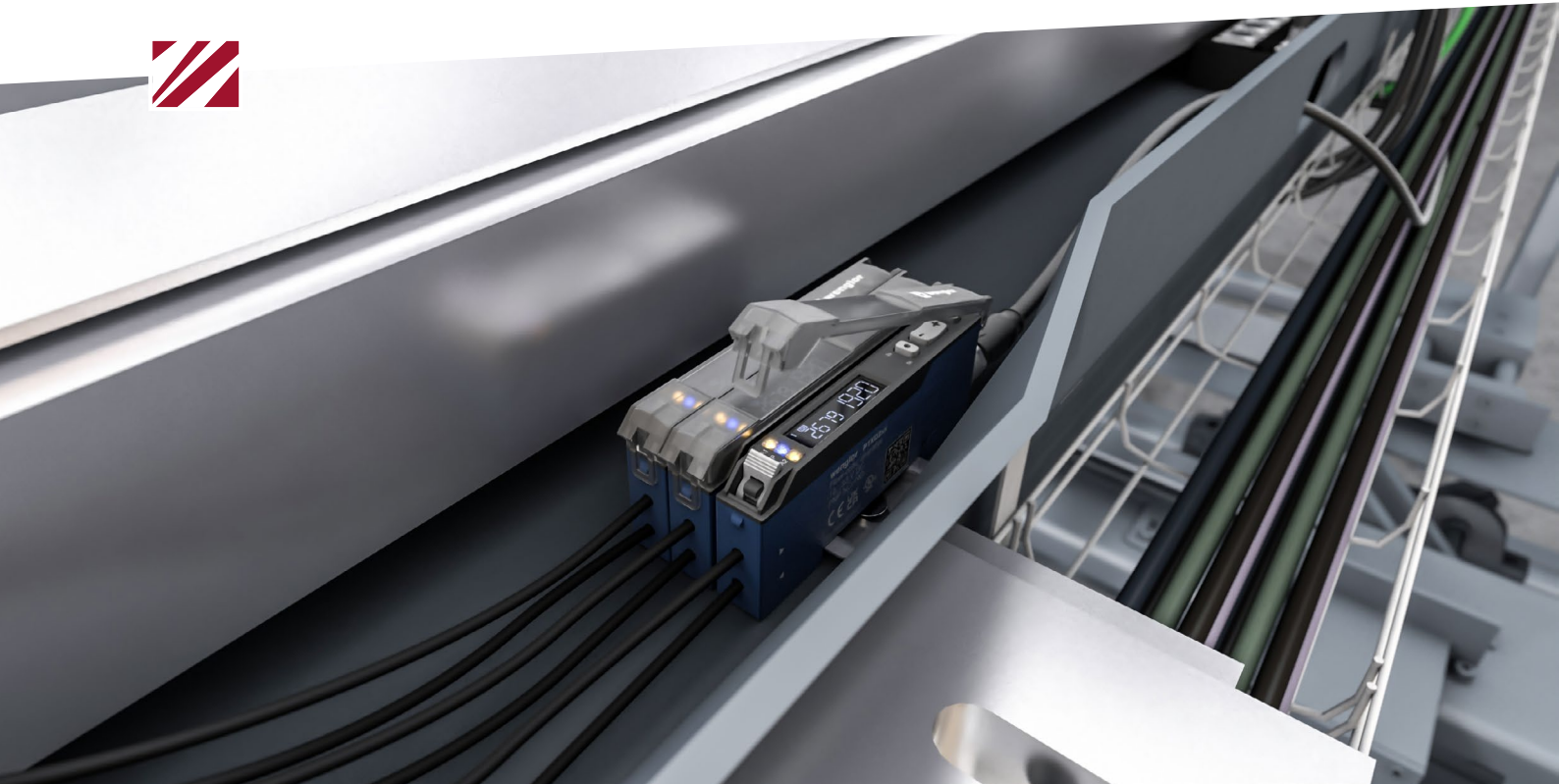




Highest Performance in the Smallest Spaces.  
**Fiber-optic amplifier P1XD**



# Product Advantages of Fiber Optic Sensors



## Flexible Installation

- Compact design for tight industrial environments
- High flexibility for versatile applications
- Low damping for long transmission distances



## High Reliability

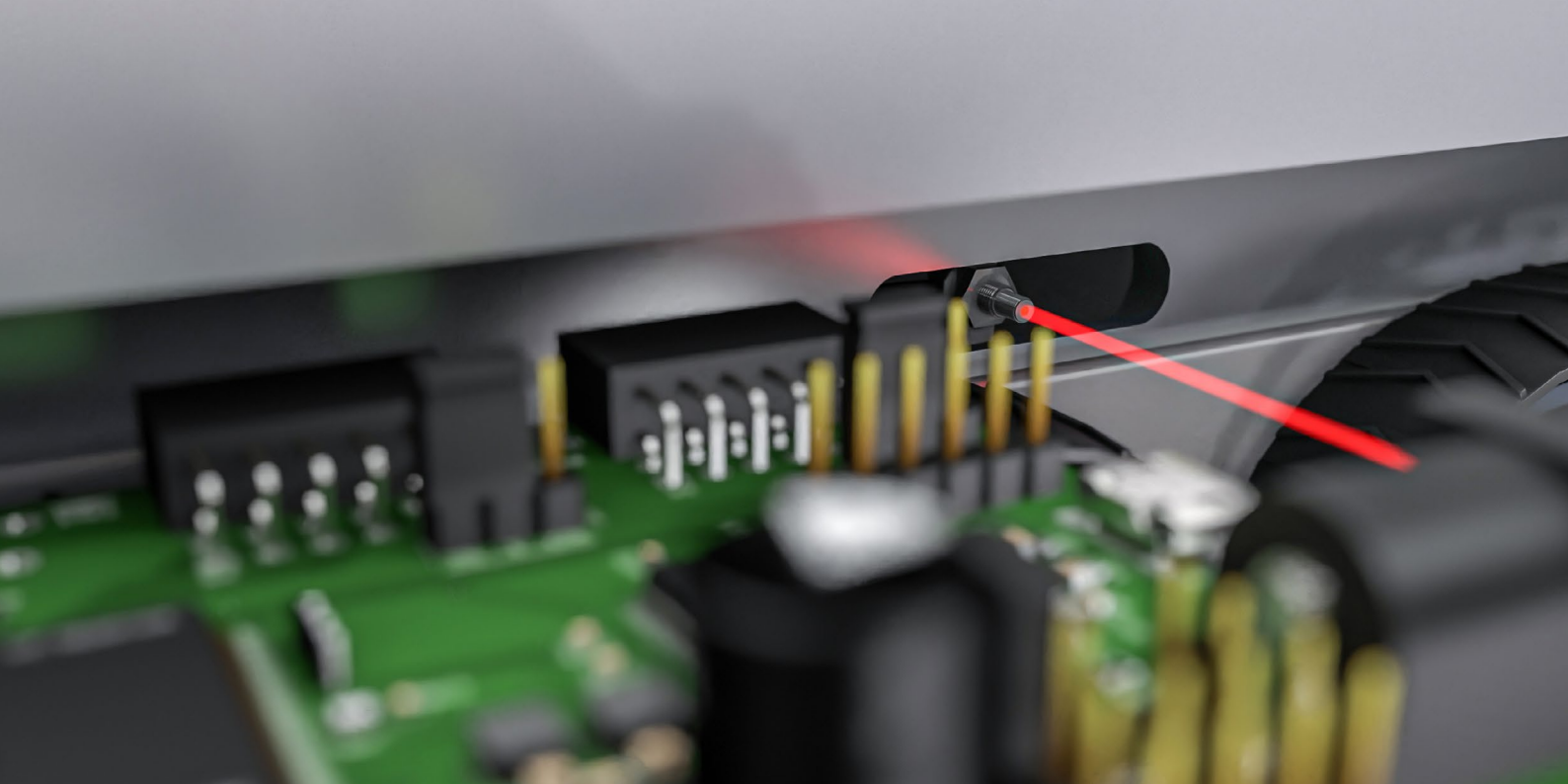
- Extremely robust
- Reliable performance in harsh conditions such as high temperatures, humidity and aggressive media



## Electromagnetic Compatibility

- Purely optical signal transmission in fiber optic cables
- Insensitive to electromagnetic interference
- Do not cause electromagnetic interference





## Overview of Operating Modes and Functions

Fiber-optic sensors impress with their compact format and outstanding flexibility, which enables easy integration into various applications. With their versatile operating modes and features, they are the ideal choice for demanding tasks with limited space requirements in the automated industry.

### Easy Operation

Ergonomic buttons, a clearly visible, inverted black and white display and fast communication via NFC and IO-Link ensure user-friendly operation.

### Dynamic Readjustment

The sensor automatically adjusts to contamination and temperature fluctuations, which keeps the switching distance constant.

### Jump Detection

Jump detection detects signal deviations due to changes in light intensity and is robust against contamination and misalignment.

### Pink Light Mode

Activated by pressing a button, IO-Link or NFC, the pink light mode enables the increase in light output and range through the parallel connection of the red and blue LEDs.

## Numerous Usage Options

Thanks to the modular principle, fiber-optic amplifiers can be easily combined with plastic and glass fiber-optics as well as various sensor heads, guaranteeing high adaptability. This ensures precise measurements – even in challenging environments and extreme temperatures.

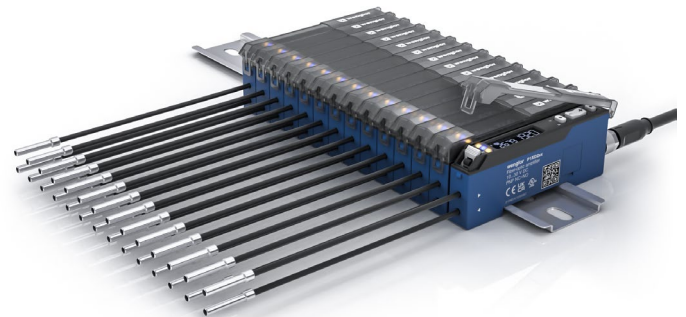
- ✓ Limited space
- ✓ High temperatures
- ✓ Recognition of small parts






## Multi Unit Mode

The multi unit mode offers the option of operating an amplifier as a stand-alone, master or sub unit. During the boot process, the sensor detects whether it is in stand alone or multi unit mode and organizes the sensor units independently. The process data is then transferred via IO-Link.

- ✓ Automatic detection and organization reduces error proneness
- ✓ Low installation effort as only the master needs to be supplied with power
- ✓ Amplifiers can be easily unplugged and used as stand-alone devices, maintaining flexibility



# Product Overview

Product	Working range	Property	Output
 P1XD0xx	180 mm	LED (red, blue), potentiometer	Antivalent/1 × NO contact, 1 × NC contact error output
 P1XD1xx	230 mm	LED (red, blue), teach-in, display, NFC	Antivalent/1 × NO contact, 1 × NC contact error output/ 2 × NO contacts Analog vortage, 1 × NO contact Analog current, 1 × NO contact
 P1XD2xx	320 mm	LED (red, blue, pink), teach-in, display, NFC, stand alone/multi unit	2 × NO contacts

All models are equipped with the IO-Link interface.



Applications	Plastic fiber-optic cable band	Glass fiber-optic cable band
Limited space	×	×
High temperature range		×
High-flex fiber-optic cable	×	
Fiber-optic cable band	(×)	×
Resistance to aggressive media		×
Fiber-optic cable with integrated optics	×	
Robust fiber-optic cables		×



You can find all the details on the fibre-optic sensor portfolio on our website.





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