



## OPTICAL IDENTIFICATION

## PRODUCT OVERVIEW



# Automation is our world. A perfect application solution is

A willingness to take entrepreneurial risks, a pioneering spirit, and a firm belief in their own inventive powers – these were the assets that Walter Pepperl and Ludwig Fuchs started out with when they opened their Mannheim radio repair shop in 1945. Their invention of the proximity switch a few years later proved their strength. It was also the starting point in a successful history defined by close customer relationships as well as innovative automation technologies and procedures.

Then as now, our focus is directed squarely on the individual requirements of each customer. Whether as a pioneer in electrical explosion protection, or as a leading innovator of highly efficient sensors – the close communication with our customers is what allowed us to become the leader in automation technology. Our main objective is combining state-of-the-art technologies and comprehensive services to optimize our customers' processes and applications.

For more information, please visit our website: [www.pepperl-fuchs.com](http://www.pepperl-fuchs.com)





our goal.

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# Reliable Identification for Depend

Whether we're talking about production or logistics, maximum process reliability and plant availability are the key criteria in automation technology. The optical identification systems from Pepperl+Fuchs make an important contribution here. These systems can be adapted to any environment quickly and simply, and offer reliable performance even under critical conditions.



## Print and paper industry

- Incorrect sheet control in stamping, collating, folding, and binding machines
- Code reading in enveloping machines



## Material handling

- Container and shelf reading
- Manual picking
- Code reading on cardstock and pallet stations



## Automotive industry

- Track-and-trace applications for components
- Odette label reading
- Skid identification
- High-temperature code reading in the paint shop

# able Processes



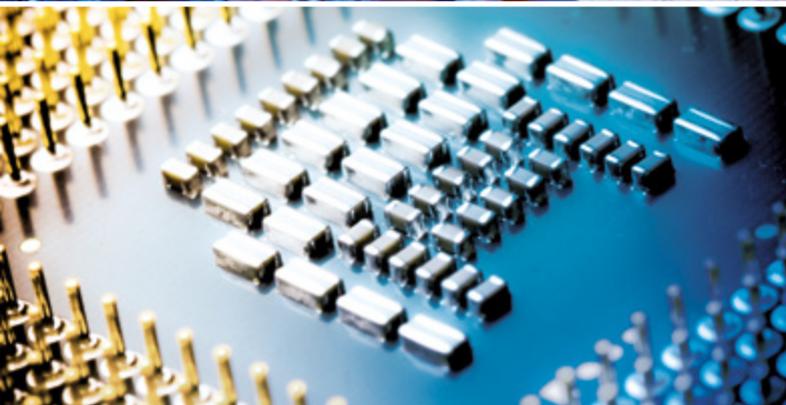
## Packaging industry

- Verification of cigarette packaging
- Assignment of products to outer packaging
- Print presence detection



## Machine and plant engineering

- Track-and-trace applications
- Bobbin detection
- Wafer handling machines



## Semiconductor industry

- Control of SMD placement
- Wafer handling in the solar industry
- Control unit production in high-temperature processes



## Doors, gates, and elevators

- Access control
- Identification of AGS in hospitals

# Perfectly Adapted to the Application Configurator

The Vision Configurator from Pepperl+Fuchs enables a broad range of parameters to be configured at the click of a mouse, allowing the user to fine-tune settings within a very short space of time. JavaScript enables even complex applications to be mapped without an external PC. Operation can be this simple.

## **Vision Configurator — intuitive operating software for camera-based code readers**

The Vision Configurator controls all camera-based code readers and handheld devices at the click of a mouse. The operating software can be used to set various functions, such as device optimization, exposure time, and code selection. Live images support the parameterization process.

## **JavaScript for endless possibilities**

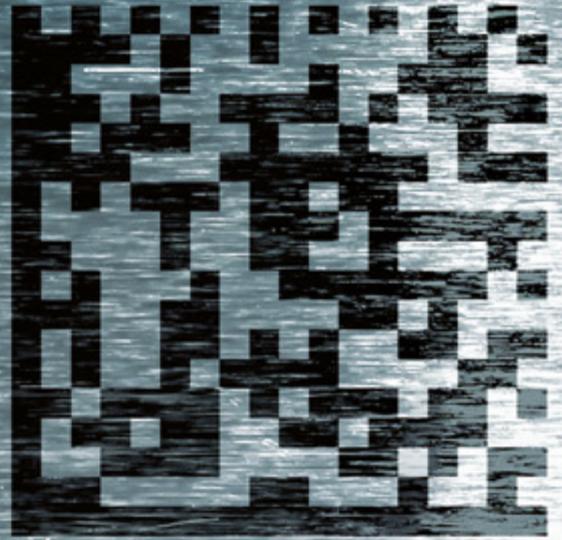
JavaScript is a tailored software solution for a broad range of programming options. Complex applications can be customized without an additional PC. JavaScript enables input and output adaptation to all control and ERP systems.



# on – It's So Easy with the Vision



The software is available at [www.pepperl-fuchs.com/vision-configurator](http://www.pepperl-fuchs.com/vision-configurator)





# Precision Meets Speed

The OPC120 Series code readers are true performance artists. They provide top performance when stationary and in motion, even under the toughest conditions. These camera-based 1-D/2-D code readers offer user-friendly operation and a range of unique features.

# OPC120W — Economical and Versatile

The OPC120W code reader is an affordable solution for detecting one- and two-dimensional codes — even at high cycle speeds.



## Absolute reliability for standard applications

The OPC120W code reader features reliable reading results. When it comes to standard applications and speed, this code reader is impressive with its large depth of focus and powerful functions. Logo comparison, multi-window function, and print presence detection guarantee reliable process flows at movement speeds of 6 m/s and 30 readings/s.

## Highlights:

- 1-D/2-D code reading at various distances and in various sizes with a single setting due to large depth of focus
- Movement speeds of up to 6 m/s at 30 readings/s
- Powerful functions — print presence detection, logo comparison, and multi-window
- Customization with user-friendly software

## Simple operation

The Vision Configurator is a graphical user interface that facilitates the output of recent images and fault patterns, storage of settings, and formatting of the output string.

This can be the easiest way to configure the code reader Series OPC120 for its tasks.



# OPC120P — Top Performance for Complex Requirements

The OPC120P code reader is the ideal solution for reflective surfaces and high-speed applications.

## Suitable for a wide range of applications

The OPC120P simply masks bright or curved surfaces such as metal, glass, or plastic using a unique polarization filter technology. An unusually large depth of focus ensures first-class reading performance. This code reader reliably reads large and small codes at various distances with a single setting, making it flexible to use and suitable for a wide range of applications.

Other functions, including a rotary encoder input for path-synchronous reading and a function for reading barcodes of up to 200 mm in length through multiple image capture, make this code reader unique.

## Highlights:

- Reliable 1-D/2-D code reading even on highly reflective surfaces
- High-speed code reading of up to 10 m/s and 100 readings/s
- Large depth of focus ensures reliable operation at different distances, off-sets, and code sizes
- Powerful functions, including reading of long barcodes, print presence detection, multi-window, and logo comparison
- Trigger delay using rotary encoder input



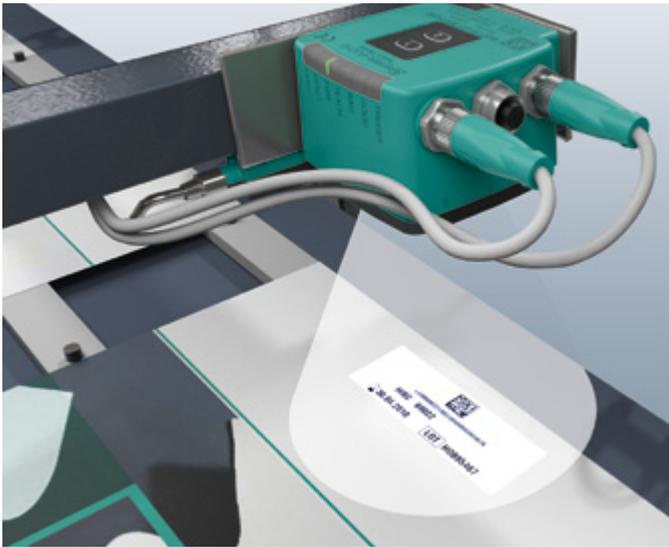
## Other features of the OPC120 Series:

- Match code
- Output string formatting
- Automatic storage of fault patterns
- Setting of digital inputs and outputs

# Versatility through Powerful Funct

The OPC120 Series code readers offer a host of functions that open up a broad range of applications. No matter how complex the requirements or how difficult the surface — all codes are reliably detected.

## PRINT PRESENCE DETECTION



The print presence detection function checks changing structures, ensuring that the required production data, serial numbers, and shelf life details are in place.

## LOGO COMPARISON



The logo comparison function ensures that logos are present and correctly positioned.

Product	Read field	Read distance	Min. module size	Object speed	Code symbologies	Inter- faces	Degree of protection	Dimensions in mm
<b>OPC120P-F201-R2</b>	Max. 105 mm x 65 mm	70 mm to 180 mm	0.2 mm	10 m/s	Data Matrix, Code 39, Code 128, INT 2 of 5, EAN 13, Pharmacode	Ethernet TCP/IP, RS232, I/Os	IP67	70 x 70 x 53
<b>OPC120W-F200-R2</b>	Max. 105 mm x 65 mm	70 mm to 180 mm	0.2 mm	6 m/s		Ethernet TCP/IP, RS232, I/Os	IP67	70 x 70 x 50

## MULTI-WINDOW



The multi-window function guarantees shorter processes with complete reliability. The read range is divided into up to four fields, which are then detected and evaluated separately. In just one step, codes are read and compared, and the presence of logos and print is checked.

## MULTI-EXPOSURES



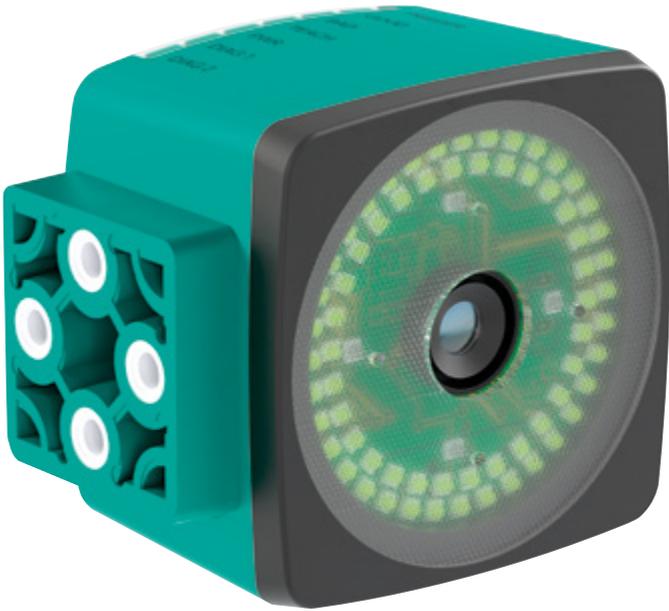
This function allows particularly long barcodes to be read. Any code exceeding the read field of the OPC120P is detected in multiple sequential captures, enabling barcodes of up to 200 mm to be reliably read.

Accessories	Description
<b>ML4.2-xxxx</b>	Trigger sensor
<b>V19-G-ABG-PG9</b>	Female field connector for connection cable
<b>V19-G-2M-ABG</b>	Connection cable, 2 m
<b>V19-G-5M-ABG</b>	Connection cable, 5 m
<b>V1S-G</b>	Field connector – male
<b>V1SD-G-2M-PUR-ABG-V45X-G</b>	Network cable, 2 m

Additional information is available at [www.pepperl-fuchs.com/2-D-code-readers](http://www.pepperl-fuchs.com/2-D-code-readers)

# Unparalleled Performance for Incorrect Sheet Detection

The combination of image and code comparison in one sensor is unique and, for the first time ever, enables the detection of incorrect, faulty, or incorrectly aligned printed sheets during ongoing production.



## Unique: code and image comparison in one sensor

In the printing industry, the BIS510 vision sensor is used in folding, collating, and binding machines. It monitors correct sheet sequence by means of image and code comparison.

The extremely high sensor resolution even detects language variants and the tiniest deviations from the reference sheet.

Barcodes are read in vertical or horizontal orientation. Omni-directional detection of Data Matrix codes is available as an option.

Combining two functions in one sensor cuts investment costs and minimizes installation and operation effort.

Product	Image field	Operating distance	Tolerance range	Sheet speed	Evaluation frequency	Code symbologies	Interfaces	Degree of protection	Dimensions in mm
<b>BIS510-60-WH-F200A</b>	65 mm x 40 mm	55 mm	> ± 10 mm (X,Y) > ± 6 mm (Z) 5° (rotation)	< 4 m/s	10 Hz	2/5 interleaved, Code 13, Code 39, Code 128, Pharmacode, Data Matrix (optional)	Ethernet TCP/IP	IP67, dust repellent	70 x 70 x 50

## IMAGE COMPARISON



The vision sensor monitors the sheet sequence using the printed image. A reference sheet is automatically taught in and compared with the subsequent sheets. Any sheets not conforming to the reference sheet are reliably detected – whether it be a misprint, an incorrect language version, or an incorrectly aligned sheet.

### Highlights:

- Reduced installation effort – image comparison and code detection in one device
- Shorter changeover times – automatic Teach-In of reference sheet
- High reading speeds – up to 4 m/s at 10 sheet/s
- Optimized process reliability – powerful illumination guarantees reliable detection on reflective surfaces

Accessories	Description
ML4.2-xxxx	Trigger sensor
V19-G-ABG-PG9	Female field connector for connection cable
V19-G-2M-ABG	Connection cable, 2 m
V19-G-5M-ABG	Connection cable, 5 m
V1S-G	Field connector – male
V1SD-G-2M-PUR-ABG-V45X-G	Network cable, 2 m

## CODE COMPARISON



In addition, the BIS510 compares all standard 1-D codes, as well as Data Matrix codes (optional). It also reads barcodes with a height of just 2 mm.

### Sheet sequence control

The BIS510 can monitor sequences of different printed sheets as an option. The vision sensor enables image comparison of up to 14 consecutive sheets, while the code comparison function guarantees the correct sequence of up to 128 printed sheets.

### Other features of the BIS510:

- Permanent storage of the taught-in reference image
- Storage of incorrect sheets in the fault pattern memory bank
- Ethernet interface for image and data communication
- Simple integration into graphical user interfaces
- Option of connecting a trigger sensor

Additional information is available at [www.pepperl-fuchs.com/BIS510](http://www.pepperl-fuchs.com/BIS510)

# Intelligent Handheld Devices for M

Outstanding read quality, easy to use, and perfect adaptation to the application. The OHV Series handheld devices for 1-D and 2-D code reading reliably satisfy these requirements and offer a high level of user-friendliness.

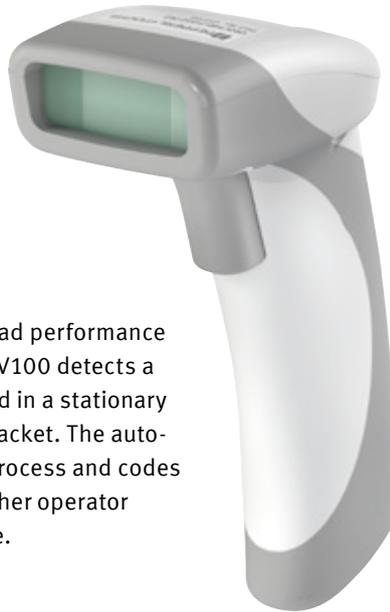
## Intelligent features for high performance

The handheld devices' patented dual-lens combined with a particularly high resolution of 1.2 million pixels offers reliable reading of different-sized codes within one distance range.

The handheld devices read codes on reflective surfaces without fail. Optimal read feedback via vibration, an LED display, and audible signals guarantees reliable process control.

## OHV100 — wired handheld device with unique read performance

The OHV100 handheld device combines high read performance with a compact design and ease of use. The OHV100 detects a wide range of code symbologies and can be used in a stationary position in conjunction with the flexible OHV bracket. The automatic motion detector is activated during this process and codes are automatically read without the need for further operator intervention. The result is an efficient procedure.



## Highlights:

- Outstanding read performance in a compact housing
- Reliable reading of a wide range of code symbologies
- Flexible stands for stationary reading applications

## Highlights of the OHV handheld devices

- Outstanding read performance for reliable code reading of different-sized codes, even on reflective surfaces
- Customization to any application with JavaScript
- Versatile with robust housing and high degree of protection

# Maximum Convenience



## **OHV200 — wireless and flexible performance via Bluetooth**

The OHV200 handheld device features an integrated data memory. This allows numerous read results to be stored temporarily on the handheld itself.

The data is automatically transferred to a PC via Bluetooth or by placing the OHV200 in the charger, shortening workflows and guaranteeing first-class efficiency.

The handheld device is also incredibly robust for use in tough industrial environments.

## **Highlights:**

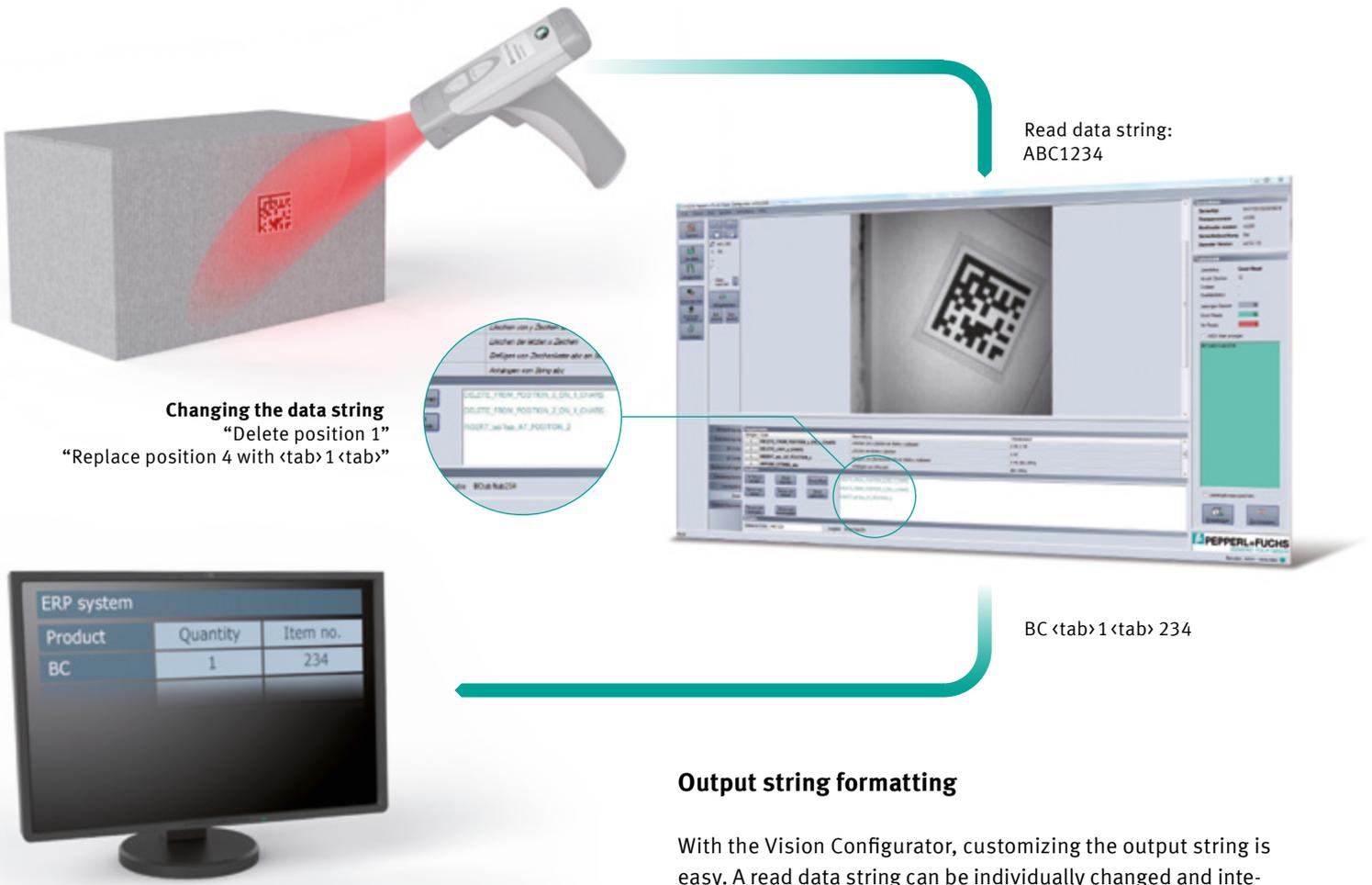
- Read results stored directly on the handheld device
- Charger with integrated Bluetooth modem
- Automatic data transfer via USB or Bluetooth
- Long battery life for continuous operation
- Also available without handle for maximum comfort
- High degree of protection (IP65) permits use in harsh environments



Excellent read performance, even on difficult surfaces such as PCBs.

# Extra Flexibility

The OHV Series handheld devices can be conveniently adapted to any application with control codes, the Vision Configurator, or JavaScript.



## Output string formatting

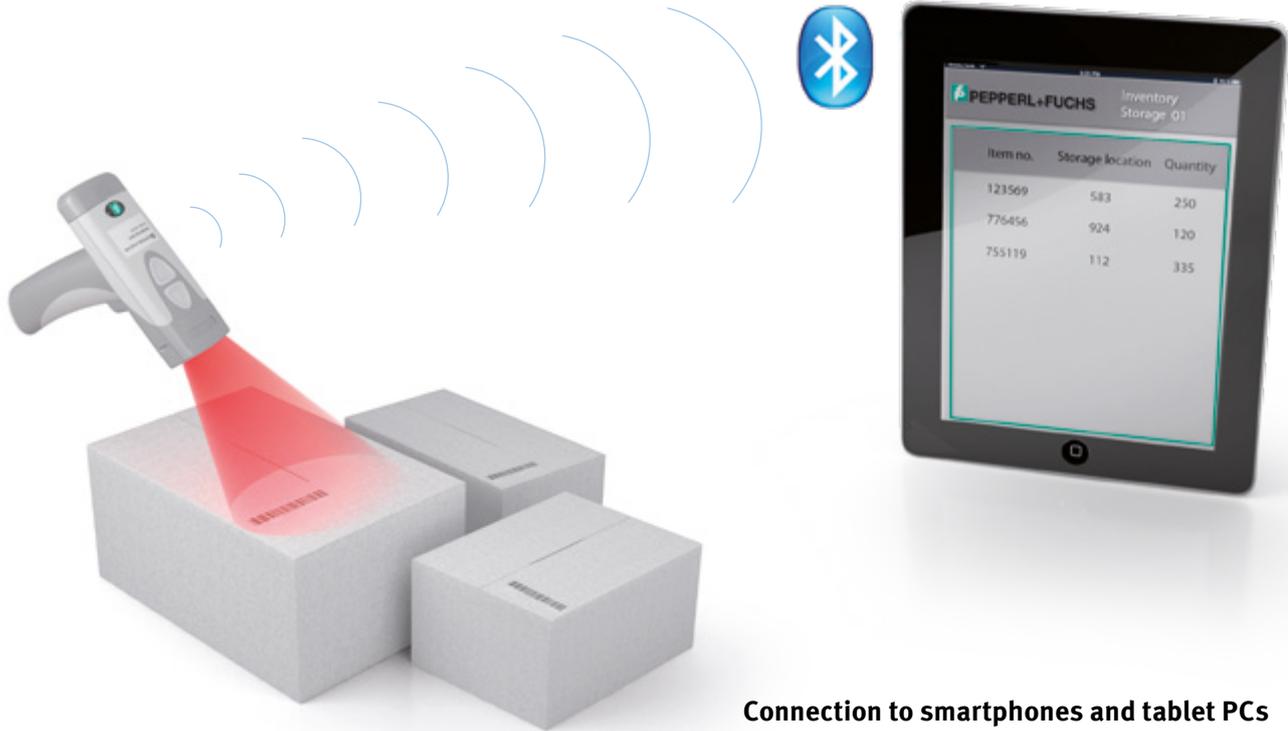
With the Vision Configurator, customizing the output string is easy. A read data string can be individually changed and integrated into ERP systems via a simple selection of commands.

Product	Model number	Read field	Read distance	Min. module size	Code symbologies	Interfaces	Degree of protection
<b>OHV100</b>	OHV100-F222-R2	Max. 190 mm x 290 mm	40 mm ... 310 mm	0.1 mm	Data Matrix, Aztec, Han Xin Code, Micro QR Code, QR Code, PDF417, MicroPDF417, GS1 Composite, INT 2 of 5, Matrix 2 of 5, GS1 DataBar, Codabar, Code 11, Code 32, Code 39, Code 93, Code 128, MSI Plessey, Plessey, Straight 2 of 5, Trioptic, UPC, EAN, JAN, Pharmacode	USB, RS232	IP54
<b>OHV200</b>	OHV200-F220-B15 (without handle) OHV200-F221-B15 (with handle)	Max. 190 mm x 290 mm	40 mm ... 310 mm	0.1 mm		Bluetooth, USB (via charger)	IP65

## Simple configuration

For standard applications, the handheld devices can be configured on the device itself. This requires only control codes to be read.

The Vision Configurator visualizes read results and assists fine-tuning of a wide range of parameters. For highly complex applications, the handheld devices can be programmed with JavaScript.



## Connection to smartphones and tablet PCs

The OHV200 handheld device transmits read data to Android and iOS-based smartphones and tablet PCs via Bluetooth. This process requires no additional hardware or software.

Accessories	Model number	Description	OHV100	OHV200
<b>Interfaces</b>	ODZ-MAH-B15-M3	Bluetooth modem with USB/RS232 interface		■
	V45-G-2M-PVC-ABG-USB-G	USB connection cable	■	
	V45-G-2M-PVC-SUBD9	RS232 connection cable	■	
	ODZ-G-1M-PVC-ABG-USBB-G	USB cable from charger to PC		■
<b>Power supply</b>	ODZ-MAH-SUPPLY	Power supply for RS232 and charging cable	■	■
	OHV-BAT	Rechargeable battery		■
<b>Charger</b>	OHV-CHARGER	Charger with USB connection		■
	OHV-CHARGER-B15	Charger with Bluetooth modem and USB connection		■
<b>Bracket</b>	OHV-BRACKET	Bracket	■	

Additional information is available at [www.pepperl-fuchs.com/OHV](http://www.pepperl-fuchs.com/OHV)





# Optimized Performance at High Temperatures

The OIT high-temperature identification system from Pepperl+Fuchs ensures smooth processes under the toughest conditions. Highly reliable read performance is guaranteed even at temperatures exceeding 500°C.

# Robust Technology for Extreme Co

Drying systems, painting lines, galvanic plants, and bakeries operate under special production conditions in terms of temperature and pollution. The OIT system was developed with such requirements in mind. Cyclical temperature changes, continuous temperatures, and the effects of dust or paint place tough demands on material and technology. The robust high-temperature identification system satisfies these requirements.

## Infrared light for precise readouts

The OIT system works with infrared light and reliably evaluates special code sheets that feature code patterns. The infrared light guarantees optimal contrast during a read operation, enabling even dirty code sheets to be reliably identified. If the read result deteriorates during operation, the diagnostic function provides a quick analysis.

The OIT system is extremely user-friendly, maintenance-free, and provides a very long service life. After a simple installation, the device is ready to use immediately without any Teach-In.

## Highlights:

- Robust, durable solution with heat-resistant code sheets for extremely high temperatures
- Maintenance-free with one-piece housing, no additional components
- Simple connection to all standard controllers
- Integrated diagnostic function for reliable process flows



OIT500

# Conditions

## ROBUST CODE SHEETS FOR HIGH TEMPERATURES

In high-temperature applications, code sheets with a punched hole pattern are used as read/write tags. These code sheets are extremely temperature resistant and remain legible when very dirty.

### OIC-C10V2A-CB1

- For larger read-only tags and large data volumes



### OIC-C11V4A-CB2

- For smaller read-only tags and smaller data volumes



Product	Model number	Read distance	Read field (max.)	Data memory in code sheet	Interface	Code sheet	Dimensions in mm
<b>OIT200</b>	OIT200-F113-B12-CB	140 mm ... 200 mm	210 mm x 135 mm	0 to 999,999	Ethernet TCP/IP	OIC-C10V2A-CB1	188 x 116 x 297
<b>OIT300</b>	OIT300-F113-B12-CB2	100 mm ... 270 mm	210 mm x 160 mm	0 to 4,095	Ethernet TCP/IP	OIC-C11V4A-CB2	256 x 98 x 166
<b>OIT500</b>	OIT500-F113-B12-CB	200 mm ... 450 mm	330 mm x 250 mm	0 to 999,999	Ethernet TCP/IP	OIC-C10V2A-CB1	256 x 98 x 166
<b>OIT1500</b>	OIT1500-F113-B12-CB	750 mm ... 1,700 mm	320 mm x 235 mm	0 to 999,999	Ethernet TCP/IP	OIC-C10V2A-CB1	256 x 98 x 166

Additional information is available at [www.pepperl-fuchs.com/OIT](http://www.pepperl-fuchs.com/OIT)



# Wide Range of Products for Barcode Applications

When it comes to reading barcodes, every application has its own very specific requirements. Often, codes have to be read from various distances or at high speeds. Sometimes, the barcodes are damaged. With four model series, Pepperl+Fuchs offers the right solution for any requirement.

## VB6 – high performance in a compact design

The VB6 barcode reader delivers high precision in the smallest space. With an impressively compact design, the reader can readily be integrated into machines such as packaging machines without the need for any conversion work.

With a scan rate of up to 1,200 scans per second, the VB6 is the ideal barcode reader for extremely high process speeds. The VB6 effortlessly detects even the smallest barcodes down to 0.15 mm.

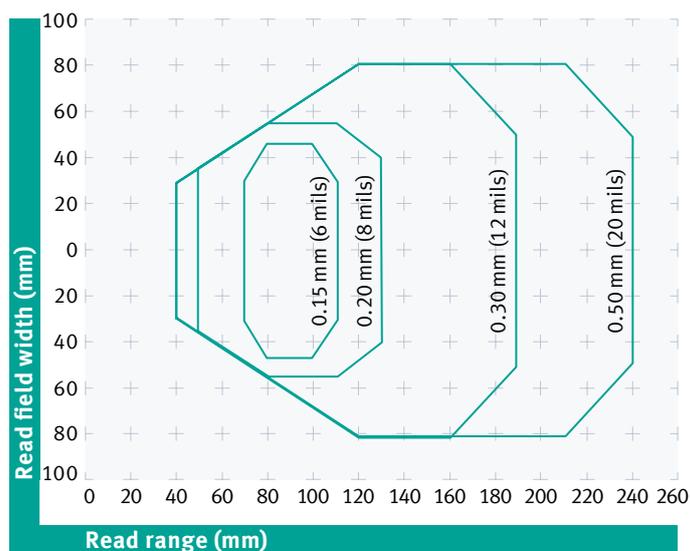
In test mode, the current read rate can be displayed on an LED display, making commissioning quicker and easier.



## Highlights:

- Compact housing
- Reads very small codes to 0.15 mm
- Very high scan rate up to 1,200 scans/s
- Read rate displayed in test mode

## Read properties of the VB6-240



Product	Read distance	Min. resolution	Scan rate	Main interface	Auxiliary interface	Dimensions in mm
VB6-240	Up to 240 mm	0.15 mm (6 mils)	1,200 scans/s	RS232/RS485	RS232	40 x 30 x 22

# VB14N – Powerful Read Performance Even at the Lowest Temperatures

The VB14N compact barcode reader guarantees highly efficient processes with an extremely high read performance.

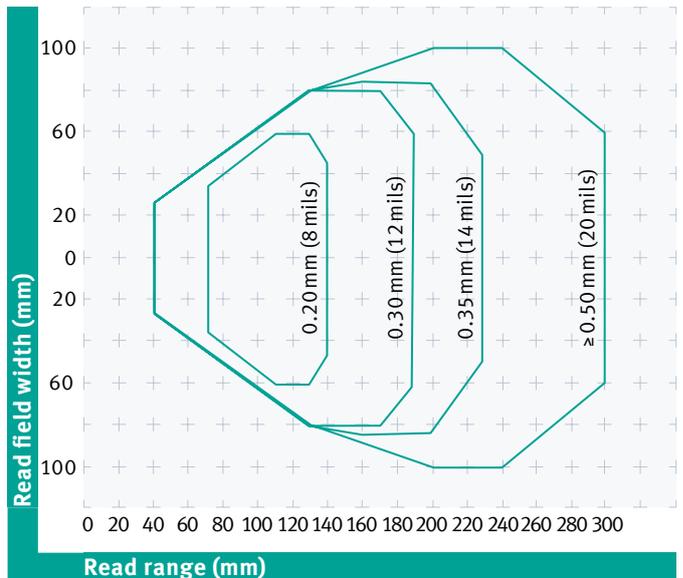


## Consistent performance across a broad temperature range

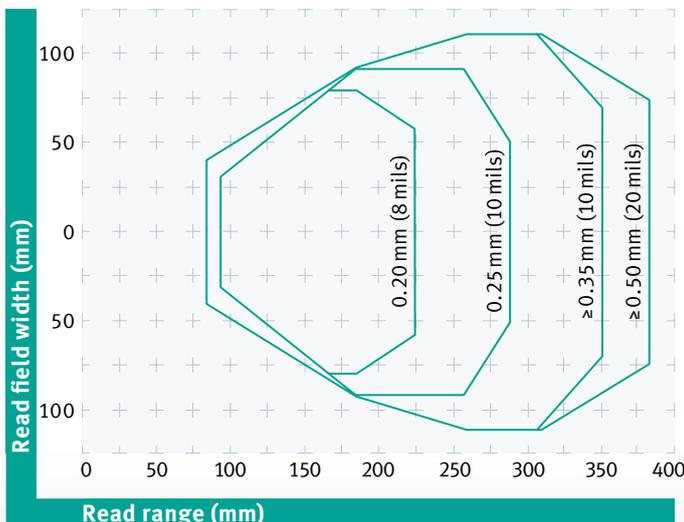
The commissioning process is supported by a wide range of functions. Unknown barcodes are detected by an automatic code identification system. Function keys on the reader itself ensure easy handling and fast Teach-In of codes.

The VB14N reads codes reliably even with difficult contrasts. The ID-NET™ networking function (also possible with the VB24) is perfectly designed to achieve maximum plant utilization.

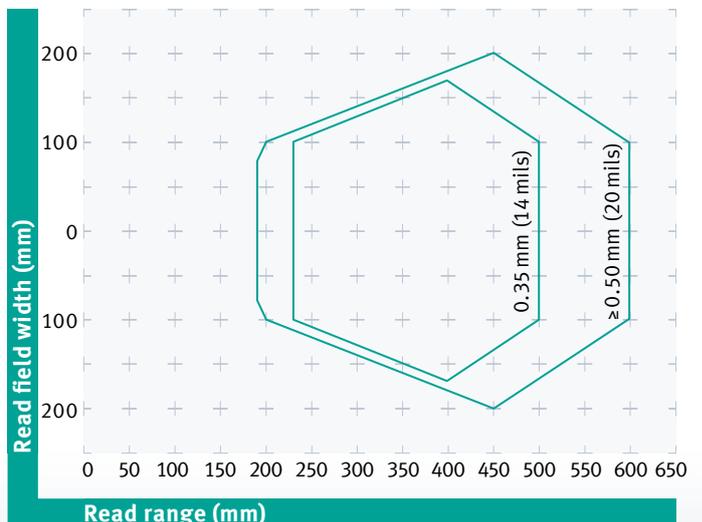
## Read properties of the VB14N-300-R



## Read properties of the VB14N-400-T/-R



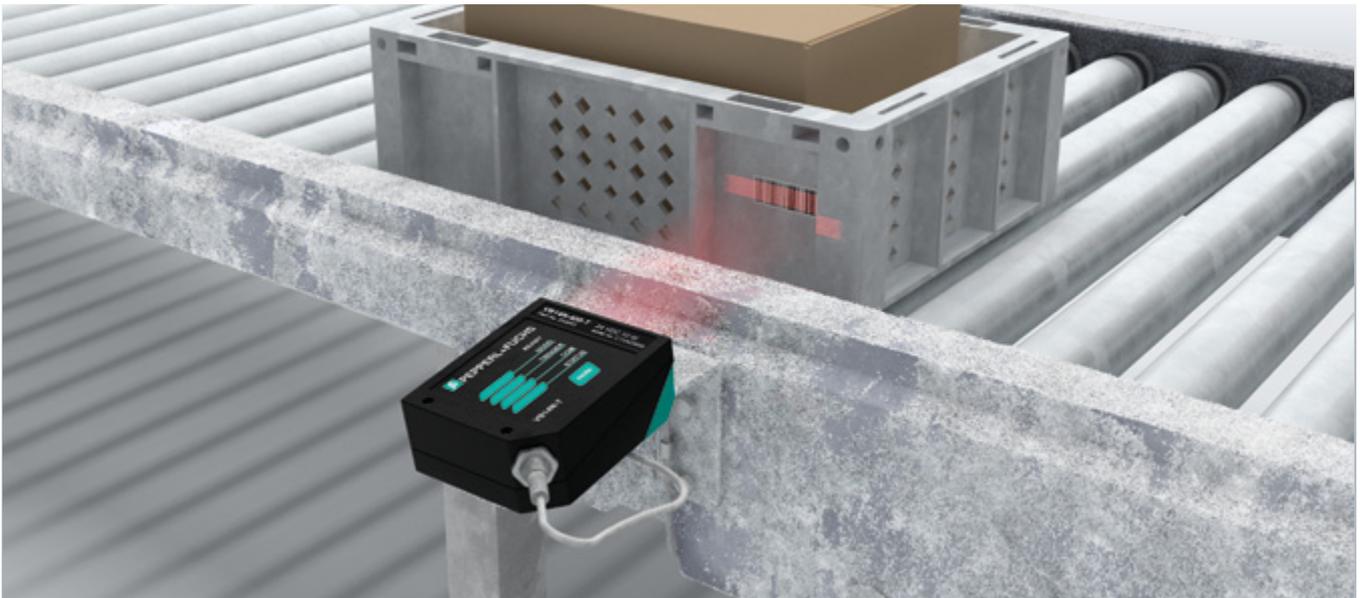
## Read properties of the VB14N-600/-R and VB14N-600-T/-R



## Highlights:

The VB14N-T is the ideal solution for use in cold storage environments. With its integrated heater, the reader withstands ambient temperatures of  $-35^{\circ}\text{C}$  ...  $+45^{\circ}\text{C}$ . The fast warm-up phase of max. 20 minutes is impressive, as is the reduced energy consumption (max. 9.6 W).

- Excellent read performance even with low barcode contrast
- Easy Teach-In of codes via mode button
- Up to 32 readers can be connected to one another via ID-NET™
- Ideal for cold storage applications down to  $-35^{\circ}\text{C}$
- Broad range of accessories for high flexibility



With an integrated heater, the VB14N-T can be used in cold storage applications and is extremely easy to install.

Product	Read distance	Min. resolution	Scan rate	Grid in mm	Main interface	Auxiliary interface	Dimensions in mm
<b>VB14N-300</b>	40 mm ... 300 mm	0.2 mm (8 mils)	500 scans/s ... 800 scans/s	–	RS232 or RS485, ID-NET™ to 1 Mbit/s	RS232	68 x 34 x 84
<b>VB14N-300-R</b>	40 mm ... 300 mm	0.2 mm (8 mils)	500 scans/s ... 800 scans/s	18 by 300			
<b>VB14N-600</b>	190 mm ... 600 mm	0.35 mm (14 mils)	600 scans/s ... 1,000 scans/s	–			
<b>VB14N-600-R</b>	190 mm ... 600 mm	0.35 mm (14 mils)	600 scans/s ... 1,000 scans/s	35 by 600			
<b>VB14N-400-T</b>	60 mm ... 400 mm	0.2 mm (8 mils)	600 scans/s ... 1,000 scans/s	–			
<b>VB14N-400-T-R</b>	60 mm ... 400 mm	0.2 mm (8 mils)	600 scans/s ... 1,000 scans/s	21 by 400			
<b>VB14N-600-T</b>	190 mm ... 600 mm	0.35 mm (14 mils)	600 scans/s ... 1,000 scans/s	–			
<b>VB14N-600-T-R</b>	190 mm ... 600 mm	0.35 mm (14 mils)	600 scans/s ... 1,000 scans/s	35 by 600			

# VB24 — Flexibility for Mid-Range Distances

The VB24 Series reader is perfectly equipped for reading barcodes over mid-range distances.

## Wide read range for greater versatility

The VB24 is ideally suited to reading codes at distances of up to 1,000 mm and can readily be used in numerous different applications.

The manual focus setting allows the read range to be set precisely on the device itself depending on the task. The integrated display enables fast configuration and offers a high degree of user-friendliness.

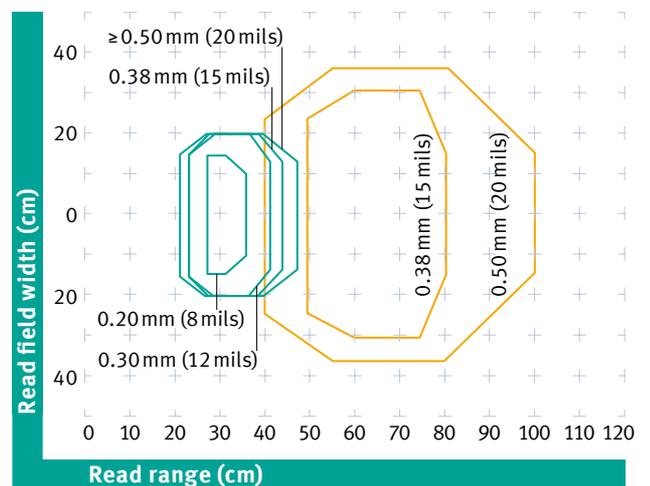
Damaged barcodes are restored via the code reconstruction function and plant shutdowns are avoided.



## Highlights:

- A reader for a broad range of applications with an extremely wide read range of up to 1,000 mm
- Precise setting of the read range on the device itself with manual focus adjustment
- Extremely user-friendly with an integrated display and function keys
- Reliable code reconstruction for reading damaged and rotated barcodes
- High-speed data communication via ID-NET™ for faster processes

## Read properties of the VB24-1000



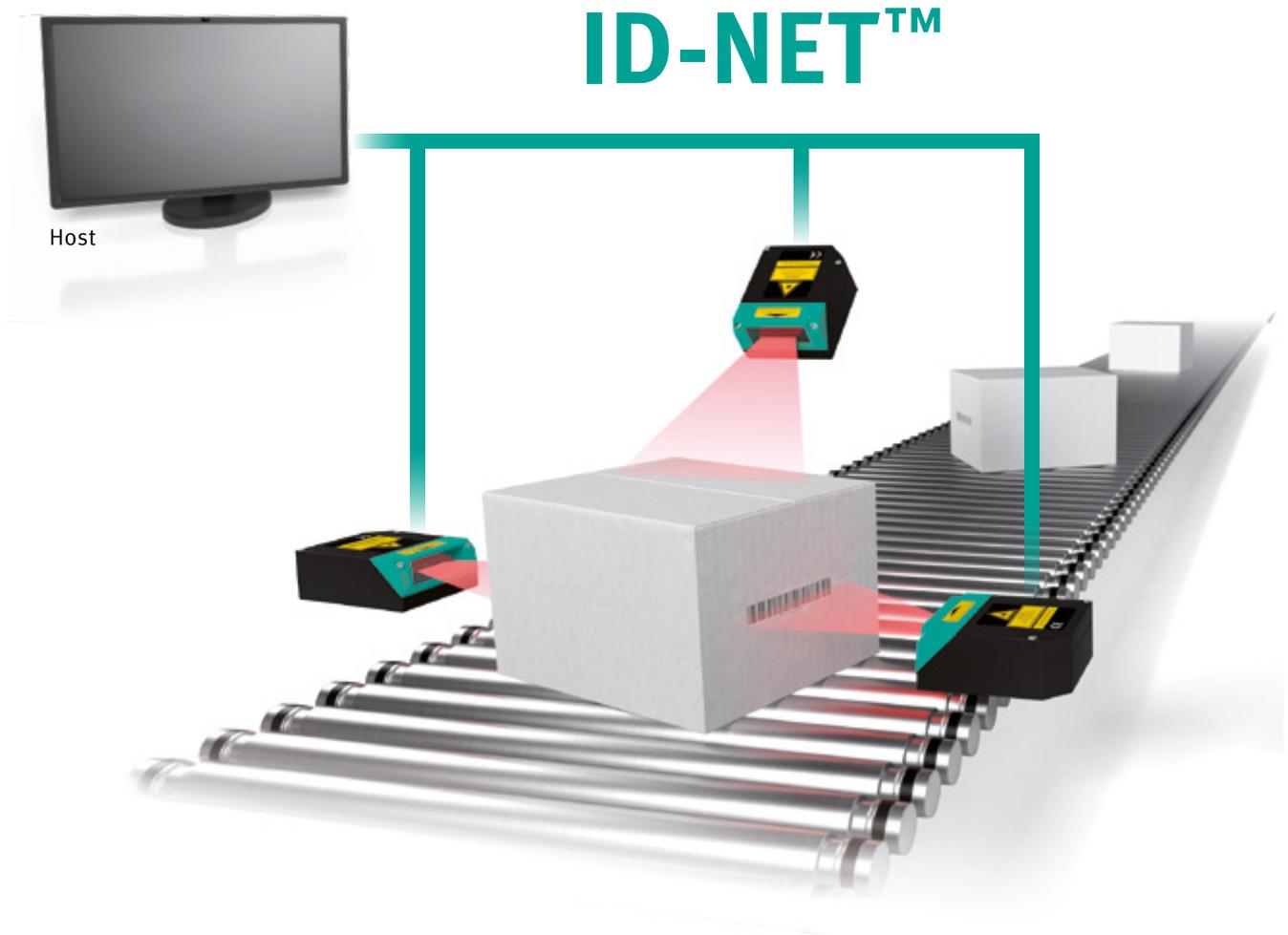
Focus = 30 cm

Focus = 60 cm

Product	Read distance	Resolution	Scan rate	Opening angle	Main interface	Auxiliary interface	Dimensions in mm
VB24-1000	200 mm ... 1,000 mm	0.2mm	Up to 900 scans/s	50°	RS232 or RS485, ID-NET™ to 1 Mbit/s	RS232	101 x 42 x 85

# Efficiency through Intelligent Networking

The specially developed data communication system allows up to 32 units of the VB14N and VB24 barcode readers to be networked to form one integrated overall solution.



## Maximum utilization of every plant

Networking the barcode readers allows multiple barcodes, which might be in different positions on a packaged item, to be detected at the same time.

The system occupies only one fieldbus address, through which all information flows quickly and efficiently. This enables maximum cycle rates and supports efficient process flows.

# Reliable Reading over Long Distances

The VB34 Series provides reliable technology for code reading over long distances. The automatic focus ensures secure identification and maximum user-friendliness. The readers read codes in their direct vicinity just as precisely as those from two meters away.



## The high-performance reader for greater ease of use

The automatic focus of the optical system can be individually programmed and therefore matched specifically to the application. The VB34 is equipped with a code reconstruction function, enhancing process reliability.

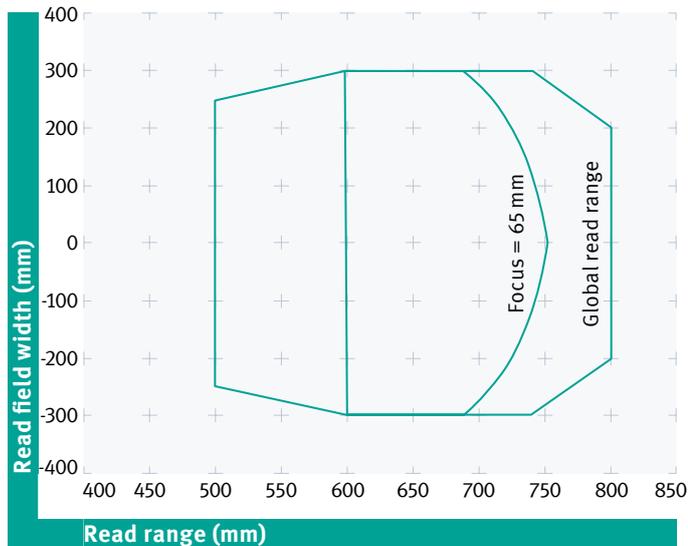
The entire reader unit is adjustably mounted and permits optimal alignment to suit the particular application. Models with different interfaces and an optional oscillating mirror enable fast and seamless integration into the existing system environment.

## Highlights:

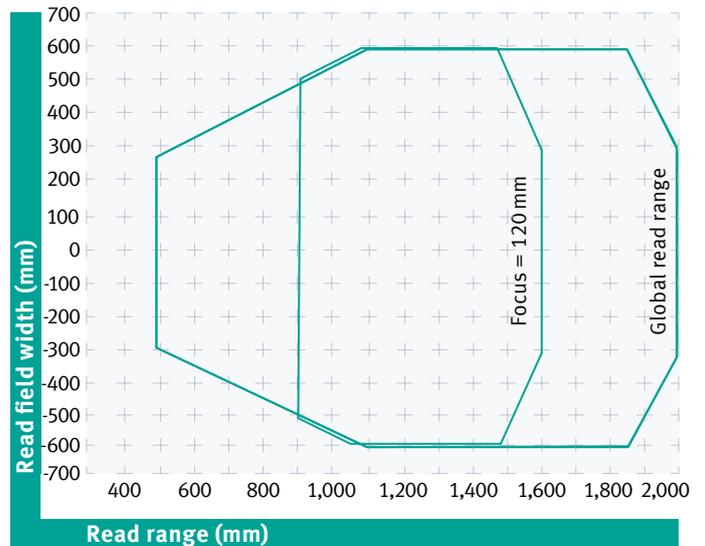
- Optimized for long distances of up to 2,000 mm
- Automatic and programmable focus setting for continuous process flows
- Reliable code reconstruction for detecting damaged codes
- Keypad and display field for ease of use
- Simple connection to the controller through interface variants such as PROFIBUS
- High level of user-friendliness with adjustable reader unit

	Linear version	Integrated oscillating mirror version
<b>Max. read distance</b>		2,000 mm
<b>Resolution</b>		0.2 mm (8 mils)
<b>Scan rate</b>		600 scans/s up to 1,200 scans/s (programmable)
<b>Readable codes</b>		All standard code symbologies
<b>Multi-label read</b>		Up to 10 different codes in the same read cycle
<b>Main interface</b>		RS232, RS485, or PROFIBUS
<b>Degree of protection</b>		IP64
<b>Auxiliary interface</b>		RS232
<b>Model number, serial</b>	VB34-2500	VB34-2500-OM
<b>Model number, PROFIBUS</b>	VB34-2500-P	VB34-2500-OM-P
<b>Dimensions in mm</b>	113 x 110 x 99	180 x 113 x 99

**Read properties of the VB34  
at a resolution of 0.20 mm (8 mils)**



**Read properties of the VB34  
at a resolution of 0.50 mm (20 mils)**



# Barcode Reader Accessories

Connector boxes for barcode readers		VB6	VB14N/-T	VB24	VB34
<b>CBX100</b>	To simplify commissioning, this connector box has numerous terminals, a plug-in serial auxiliary interface, display LEDs, switches, and jumpers. In addition, the CBX100 can be equipped with a backup module for storing the reader parameters or ID-NET™ addressing.	■	■	■	■
<b>CBX500</b>	This connector box links the barcode reader to the various fieldbus systems. Different fieldbus modules facilitate communication via PROFIBUS, PROFINET, EtherNet/IP, or TCP/IP.		■	■	
<b>CBX800</b>	This module links RS232- and RS485-capable devices to the various fieldbus systems. Different fieldbus modules facilitate communication via PROFIBUS, PROFINET, EtherNet/IP, or TCP/IP.	■			■

Interface	Model number	Degree of protection
<b>PROFIBUS</b>	CBX500-KIT-B6	IP40
	CBX800-KIT-B6	IP40
<b>PROFINET</b>	CBX500-KIT-B17	IP20
	CBX800-KIT-B17	IP20
<b>Ethernet</b>	CBX500-KIT-B19-IP54	IP54
	CBX500-KIT-B19-IP65	IP65
	CBX800-KIT-B19-IP54	IP54

Additional information is available at  
[www.pepperl-fuchs.com/barcode-readers](http://www.pepperl-fuchs.com/barcode-readers)

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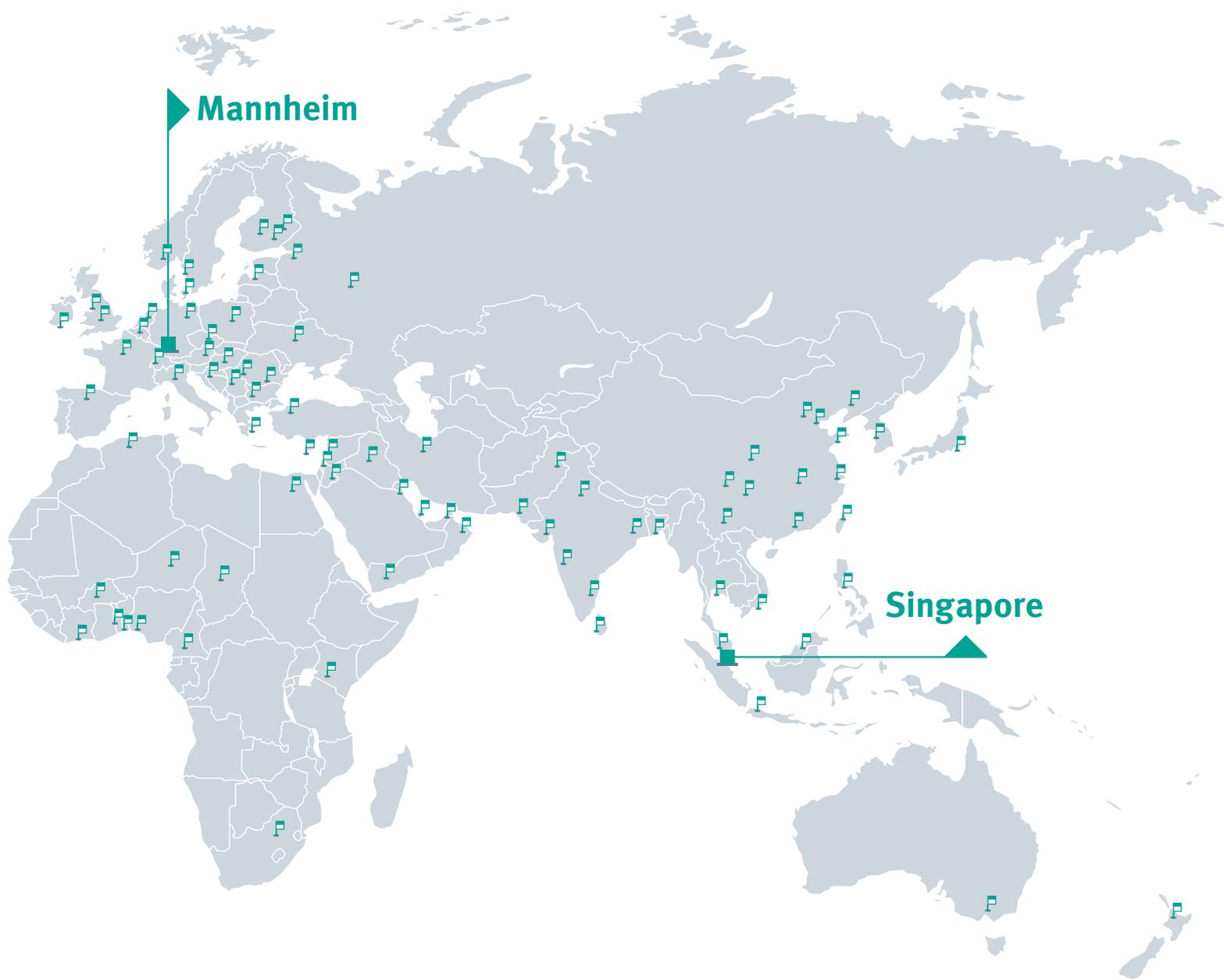
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# YOUR APPLICATION. OUR CHALLENGE.

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- Intrinsically Safe Barriers
- Signal Conditioners
- Fieldbus Infrastructure
- Remote I/O Systems
- HART Interface Solutions
- Wireless Solutions
- Level Measurement
- Purge and Pressurization Systems
- Industrial Monitors and HMI Solutions
- Electrical Explosion Protection Equipment
- Solutions for Explosion Protection

## INDUSTRIAL SENSORS

- Proximity Sensors
- Photoelectric Sensors
- Industrial Vision
- Ultrasonic Sensors
- Rotary Encoders
- Positioning Systems
- Inclination and Acceleration Sensors
- AS-Interface
- Identification Systems
- Logic Control Units

