

Automatic Coordination in Warehouses

VB14N Barcode Scanner Provides
a Reliable and Flexible Solution

At a Glance

- Reliable identification of the goods in warehouses and material-handling systems
- Broad range of accessories for high levels of flexibility
- Excellent read performance even with low barcode contrast
- Mode button makes teaching in codes very convenient
- Ideal for deep-freeze applications down to $-35\text{ }^{\circ}\text{C}$



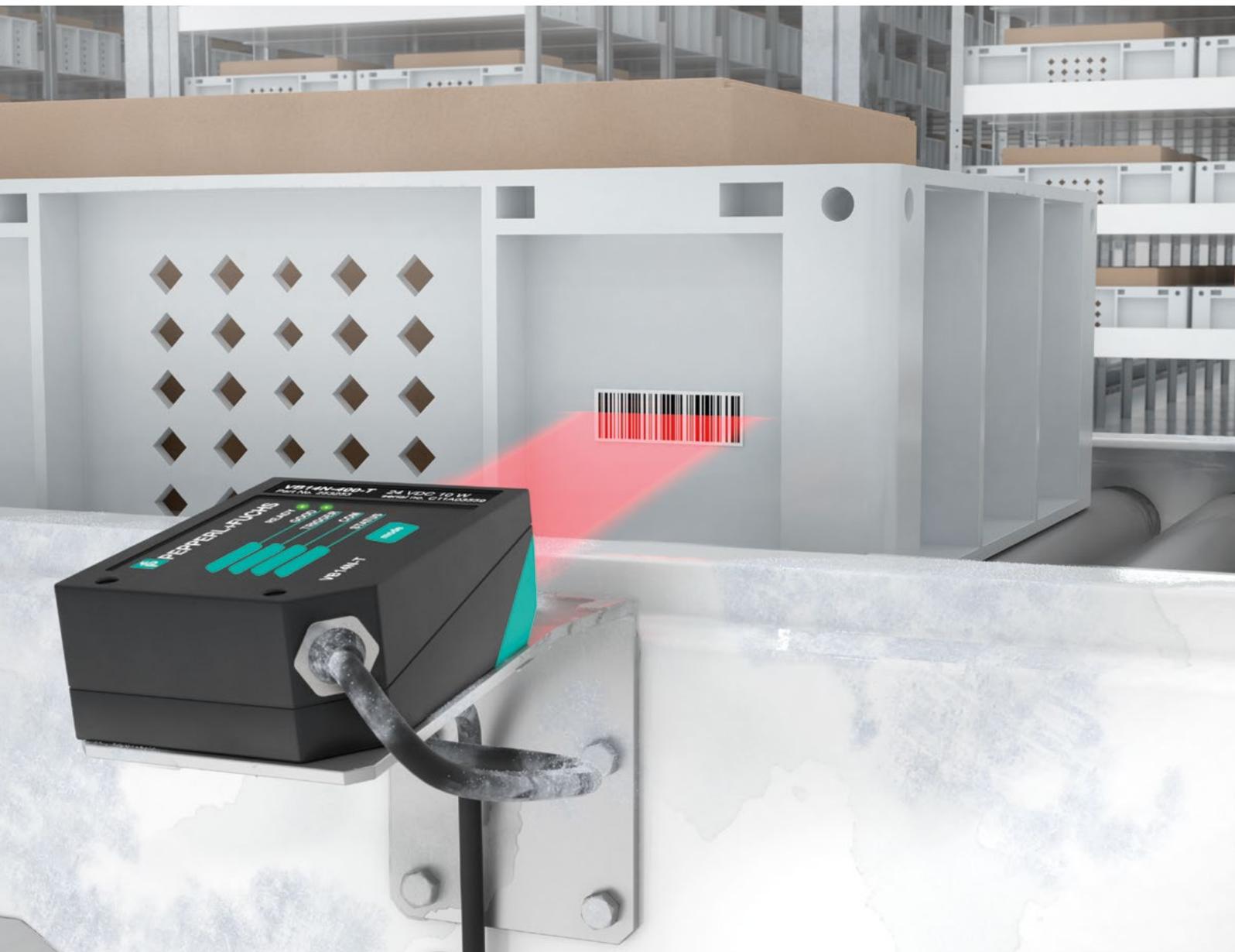
The Application

In the warehouses of logistics companies, the end-to-end flow of goods through the facility is coordinated using barcodes. The delivered goods are transported via conveyor belts to one or more intermediate storage areas before they are picked and packed for onward transport. The goods can only be transported from the warehouse once they have been clearly identified. Otherwise, there is a risk of incorrect deliveries, which can lead to high logistics costs.

The Goal

Modern warehouses and material handling facilities often have different requirements in terms of building layout and design. Flexible scanner hardware is therefore essential for ensuring that the conveyed product is reliably identified at exactly the right time. Scanners must be easy to install and the number of different scanner types used within one facility must be kept to a minimum.

In the incoming goods area, the barcodes on shipments from various suppliers are positioned at different heights, meaning an oscillating mirror scanner is required to read barcodes on the side of packages. The products are transported through the facility on trays. Usually, this means that the barcode must be read from the side, but the space available for scanner mounting may be limited to just a few centimeters where conveyor belts are positioned in adjacent rows. A scanner with a side optical face is a great solution in this situation.



The Solution

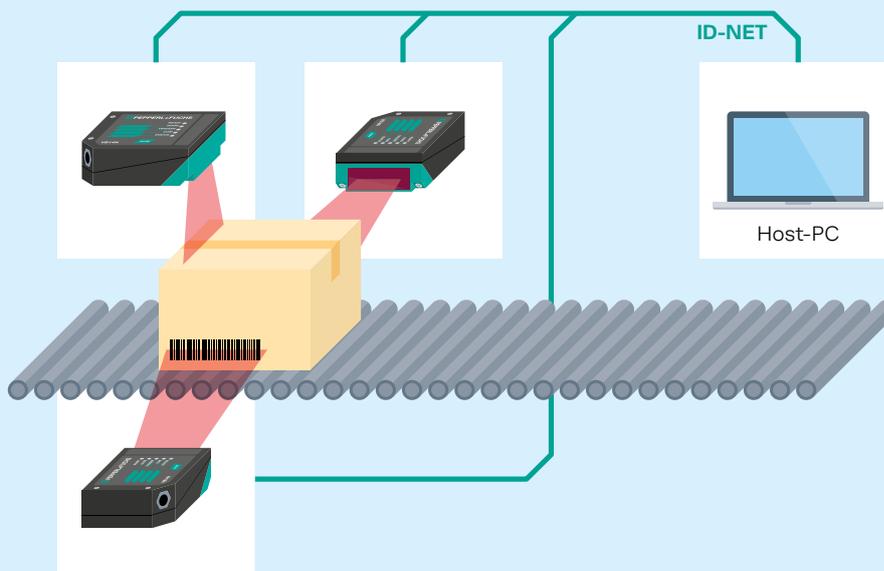
Due to its extensive range of accessories, the VB14N barcode scanner reliably handles a very wide range of reading situations: The OM-VB14N oscillating mirror attachment is used to help read the side of packages. With the help of the DM-VB14N deviation mirror, the scanner also ensures reliable identification of the conveyed product in applications with limited space for mounting.

At certain points during the process, the trays are turned and transported sideways. The barcode is now positioned on the front of the package and needs to be read from the top. In the outgoing goods area, the packages are positioned so that the barcode is always on one of the two sides, in ladder orientation and at different heights depending on the size of the package. In these situations, it is necessary to have barcode scanners on both sides of the packages. These scanners need to be

networked with each other and have a large reading range width. Up to 32 VB14N scanners can be networked together using ID-NET, making them ideal for use in this scenario.

The Advantages

The scanner boasts excellent reading performance, even with low barcode contrast. The mode button on the device makes teaching in codes very convenient. A deep-freeze version with an extended temperature range is also ideal for applications featuring temperatures down to -35°C , for example in deep-freeze storage facilities. A comprehensive range of accessories gives users the greatest possible flexibility for their applications. The VB14N can also be converted to all common fieldbuses via the CBX500 modular gateway.



Technical Features

- Read distance: 40 mm to 600 mm
- Min. resolution: 0.2 mm (8 mils)
- Scan rate: 600 scans/s to 1000 scans/s
- Interfaces: RS232, RS485 and all common fieldbuses via gateways

