

# High-Speed Code Reading in the Garment Logistics

Code reader with PROFINET interface and decentralized, jitter-free triggers

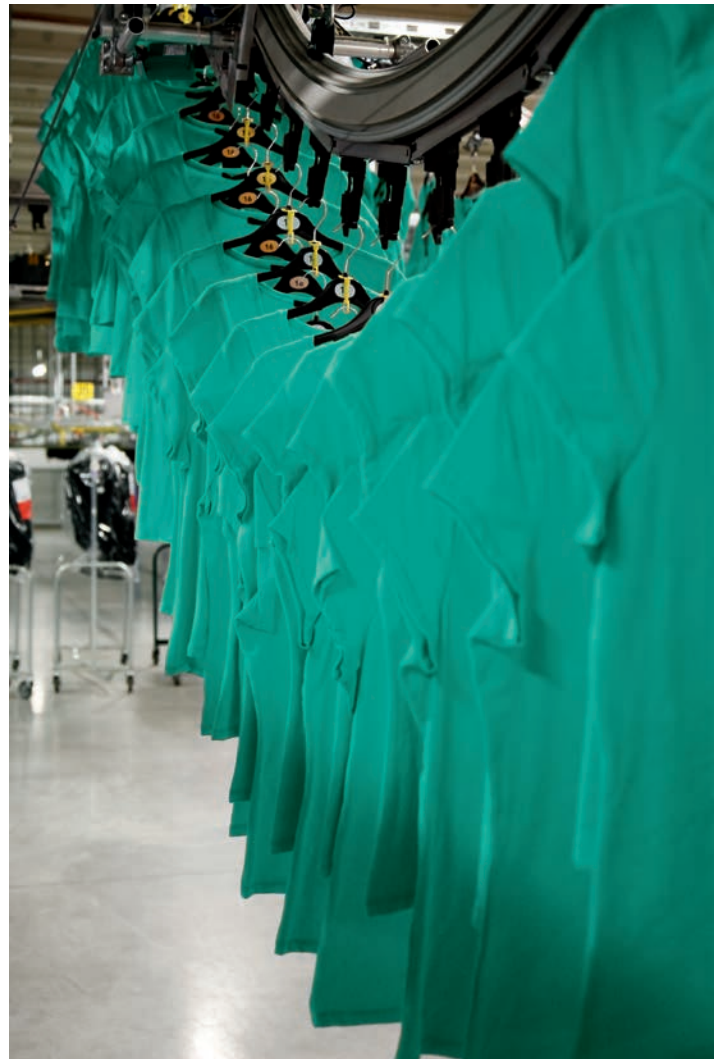
## The Goal

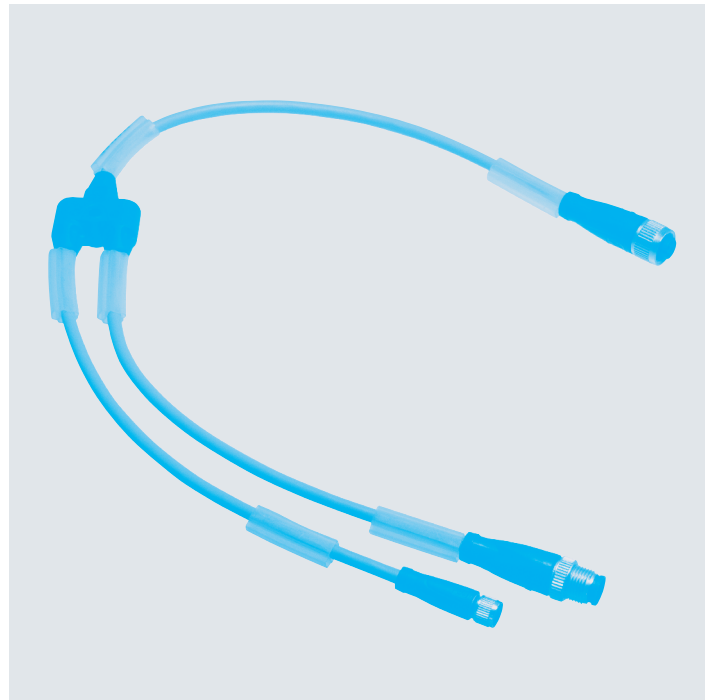
The high passing speeds and fast cycle times in the garment logistics sector mean that images must be captured precisely so that codes can be properly detected and then read reliably and quickly. If a PROFINET connection is used to read a trigger, a jitter in the controller can cause the image capture to become misaligned. In fast applications, such misalignments can lead to the code not being positioned fully within the image field – in which case it is no longer possible to read the code.

Therefore, high-speed logistics systems in the clothing industry must feature an exact, reliable, and jitter-free triggering process followed by quick decoding of the code. To ensure these conditions, a code reader that combines quick, precise image capture with instant decoding and a suitable interface is required.

## The Application

In the garment logistics sector, a large number of garments are transported, tracked, and dispatched on a daily basis. For this process, fast overhead conveyors with short cycle times are used. These conveyors enable automated handling of the goods suspended on the hangers. Every garment is given a code. It must be possible to precisely identify each garment throughout the entire process to ensure that orders are processed efficiently.





### The Solution

Optical identification systems from Pepperl+Fuchs offer cost-effective and reliable solutions that can be quickly adapted to various applications and provide optimum conditions for maximum plant availability – even in difficult ambient conditions. The OPC120P-F201-B17 code reader from Pepperl+Fuchs is perfectly designed to meet the requirements of the clothing industry and guarantees reliable assignment and traceability of goods.

Thanks to an integrated PROFINET interface, the OPC120P can be connected directly to the controller. The corresponding special cable (V19-G-0,2M-YOPC-0,2M-V1S/V31-G) enables the trigger sensor to be connected directly to the code reader. Thanks to this setup, the image capture can be performed without significant jitter, ensuring that the code stays in the same position in the image field. In addition, the OPC120P boasts powerful lighting that enables bright, high-contrast image capture even with short exposure times. This capability means that the code reader can be used in applications involving speeds of up to 10 m/s at 50 readings/s and is able to ensure continuous operation.

### The Benefits

The OPC120P is characterized by its impressive high-speed read performance. While codes are being read, the innovative polarization filter technology proves precise detection – even on reflective surfaces. In suspended clothes conveyor systems – as in many other applications – the code readers are installed in different positions. The high depth of focus enables code reading at various distances and in various sizes, using just one setting. The special Y-cable provides a further benefit, as it allows external triggering without significant time delay. Furthermore, the integrated PROFINET interface with switch saves on costs and reduces the effort required for integration. With all of these features, the OPC120P code reader and the OPC splitter provide the optimum solution for applications with fast cycles.

#### At a Glance:

- Maximum productivity at movement speeds of up to 10 m/s at 50 reads/s
- Special cable for fast, jitter-free triggering
- Integrated PROFINET interface with switch saves on costs and reduces the effort required for integration
- Reliable code reading even on highly reflective surfaces
- Large depth of field enables code reading in different intervals and sizes

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