



HIRSCHMANN

A **BELDEN** BRAND

Case Study

CS00007

Customized Hirschmann OpenBAT wireless solution enables remote communication capability for TRUMPF

TRUMPF provides highly available mobile wireless access for the operation and service of their machines using industrial Wireless LAN solutions from Belden



Introduction:

TRUMPF is a global high technology company and world technological market leader that offers production technology products and services used in almost every sector of industry.

In order to guarantee the highest reliability with flexible, cost-effective operation and service of the machine, TRUMPF offers different applications to their customers. Two examples are Visual Online Support and the MobileControl app. All Applications fulfill the highest security standards in order to enable safe and seamless communication.

Visual Online Support offers customers the ability to exchange image, audio and video files with the TRUMPF Technical Service team, simply using an app on a smart mobile device like a mobile phone or tablet PC. Over and above that, images can be edited by both sender and recipient in real time. There is also an option to do a live chat with the service team.

MobileControl App enables mobile operation of machines from the area around the machine. The app transfers the user interface of the standard control panel to an iPad touch screen, giving operators an additional means of monitoring and controlling the machine apart from the fixed control panel. Hence, it also allows operators to monitor the production process during work steps that take place away from the control panel.

**Be certain.
Belden.**



Project Details

When a customer buys a machine from TRUMPF, they can decide if they want to add additional applications: **MobileControl App** and **Visual Online Support**. If a customer orders these additional features, the machine will be equipped with a wireless operation point, which consists of the Hirschmann OpenBAT-R and the corresponding antenna.

The OpenBAT-R, with its corresponding antenna, offered TRUMPF a tailor-made solution. It enables them to guarantee their customers an innovative solution with maximum Wireless LAN (WLAN) availability in the production plant.

The OpenBAT-R operates as an access point, generating a wireless network for the mobile devices that are using one of their special apps.

The robust OpenBAT-R is placed on the DINrail of the cabinet and is able to withstand temperature ranges between 0°C and +60°C, as well as vibrations.

OpenBAT-R provides maximum stability and security for the application, using its integrated Clear Space technology and HiLCOS software.

Due to the easy configuration of the devices, the application can be offered and installed on new orders or provided as a retrofit solution for existing machines.

The Installation's Key Challenges

As the environment was evaluated, several needs were identified:

- Use of wireless LAN devices according to international standard IEEE 802.11
- Finding a solution that fit into existing communication and control cabinet
- Easy, fast and faultless installation of the devices for new and existing machines
- Wireless LAN solution that guaranteed maximum availability
- Secure and reliable wireless connection
- Worldwide and longtime availability of the solution



With the MobileControl App, machine operators keep track and control of its assets, even when they are away from the static control panel



The Installation's Key Benefits

By using the **MobileControl App** supported by the Hirschmann Wireless LAN solution the customer will have the following key benefits:

- Operators' ability to access additional machines from the same mobile device
- Minimizing errors during tool change because the control can be taken away from the fixed control panel
- Optimizing operation of the machine because operators can monitor the production process during work steps that take place away from the control panel
- Reduced customer downtime

By using the **Visual Online Support** on a machine that is equipped the Hirschmann Wireless LAN solution, the customer will have the following key benefits:

Main benefits for the customers are:

- Higher machine availability due to a substantial reduction of solution times
- Up to 25% reduction in the number of on-site service missions
- Up to 30% faster identification of necessary spare parts as complex parts can be identified immediately



TRUMPF customers receive quick assistance through an app and Visual Online Support



The TruPunch 5000 is the industry leader in terms of productivity, process reliability and flexibility.



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Industrial Wireless LAN access point – Open BAT family

Why Belden?

Belden understands the requirements of the machine building market and was able to support TRUMPF with their long-term and profound competence.

With the Hirschmann OpenBAT-R access point, TRUMPF chose a premium quality industrial solution that guaranteed maximum availability of the communication.

TRUMPF emphasized the competent and extensive support from Belden during the complete planning and design phase to get the right WLAN solution to fit their special requirements.

Another decision point was the future-proof solution that guarantees availability of products, spare parts and service around the world for the coming years, a critical factor in the machine building market due to the long lifetime of the machines.

OpenBAT Product Details and Key Benefits

- **Stable WLAN connection:** Elimination of other frequencies due to ClearSpace technology enables maximum stability
- **Secure and maximum reliable application** thanks to HiLCOS operating system
- **Industrial design:** Mountable DIN-rail version with robust housing designed for harsh environments
- **Extended temperature range:** 0°C to at least +60°C is requested in many applications
- **Maximum availability:** Belden offers longtime availability for products, spare parts and service
- **Fast and easy installation:** Cost effective worldwide installation with easy configuration for new and existing machines
- **Tailored solution:** Customized solutions that fit the requirements of the customer
- **Highly available communication:** Data rates of up to 450Mbit/s (IEEE802.11n) enable reliable wireless communication
- **Long lifetime:** Industrial design and integrated ESD protection combined with robust vibration-proof hardware ensures maximum lifetime
- **Worldwide installation and operation:** Belden products fulfill standards and approvals for the key markets
- **Technical competence:** Belden offers first-in-class technical support for the application
- **Valuable partners:** On this project, Belden enlisted channel partner YELLO NETCOM to provide additional consulting on network architecture, warehousing, logistics, and Kanban delivery



YELLO NETCOM

Channel partner YELLO NETCOM joined with Belden to provide TRUMPF first and second level support during project implementation.

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