INSTALLATION GUIDE Factbird® Barcode Solution - Fixed Mount Barcode Scanner

Hardware Setup

Installation overview

The Factbird barcode solution is an add-on to the Factbird solution designed to improve the workflow and how you collect data for analysis in the Factbird manufacturing intelligence software.

Barcode scanner and preprogrammed router



Factbird device *For installation of Factbird device, please refer to Factbird quick start guide.





*Please provide Factbird with information on the type or types of barcodes that will be detected in advance. This will help reduce the likelihood of detecting and reacting to the wrong barcodes.



Factbird provides the barcode scanner packaged with:

- Power supply Cables harness
- Ethernet cable
- Sensor for triggering scan



(2) Teltonika router RUTX11

Factbird provides Teltonika router RUTX11 packaged with:

Power supply

the solution.

- Wi-Fi and mobile antennas
- SIM card (in case of using a mobile network)

*The router is preprogrammed for

(1) Barcode scanner e.g. ifm 02I503

Connecting the router and the barcode scanner

- 1. Attach the mobile antennas to the connectors labeled "Mobile MAIN" and "Mobile AUX" and the Wi-Fi antennas to the connectors labeled "WiFi" on (2) the router.
- 2. Connect the power supply to the "PWR" connector on the front of (2) the router and to an electric outlet.
- 3. Connect (1) the barcode scanner to (2) the router's LAN port using the Ethernet cable.
- 4. Connect the cable harness to (1) the barcode scanner.
- 5. Attach the sensor to the cable harness.
- 6. Connect the power supply to the cable harness and to an electric outlet.

After the router has booted and successfully connected to the network, it should display a solid green light by the 3G or 4G indicator in case of using mobile network.



Mounting by production machines

- 1. The barcode scanner should be placed where it can scan the barcodes on products passing by e.g., at a conveyor belt
- 2. The sensor that is used to trigger a scan on the barcode scanner should be placed in proximity of the barcode scanner and placed such that it detects a product when the barcode is within the scanner's field of view.



When the sensor triggers scanning, the barcode should be within the scanner's field of view.

Sensor is for triggering a scan on the barcode scanner.

ifm Barcode Scanner Software Setup

Download the ifm software

1. Download the ifm software "ifmVisionAssistant" to your PC from ifm website (https:// www.ifm.com).

Note: Please download the ifm software on your PC before connecting it to the router. If the PC is connected while downloading, the PC may use the data connection of the router, causing the router to reach its data limit prematurely and disconnect for the rest of the month.

2. Connect your PC to one of the available LAN ports on the router which is connecting to the barcode scanner, and then launch the ifm VisionAssistant software.

Note: If you get a warning saying: "Windows Defender Firewall has blocked some features of this app", choose "Allow access" for the program to properly communicate with the scanner.



ifm software setup

1. Once the ifmVisionAssistant is open, search for sensors and select the ifm scanner by clicking the arrow button.



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- Place a product with a barcode in front of the scanner. Make sure the barcode is in the same position as it will be during production. In "Application", press the "+" symbol to create a new application.
- 3. In step 2 "Trigger" setting, choose "Positive edge" as the trigger source.

 In step 3 "Find code", let the camera adjust automatically. Disable 2D data code. If the barcode was not placed correctly, you can run the autofocus and exposure again manually.



2. Trigger

Positive edge Continuous Process interface

Positive edge

Select the trigger source



5. In step 4 "Output configuration", set the output to "Ethernet & digital outputs". "Digital outputs" is an optional setting, but can be used to give visual feedback, when a barcode is scanned (see step 6).

4. Output configuration
Select the interface you want to use for the output.
Ethernet & digital outputs $$
Select the pulse duration you want to use.
Pulsed 🗸
10 ms 2500 ms 20 ms

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6. In step 5 "Interfaces", enable "Code found", "Code content" and "Code family". Set start, delimiter and end as follows:
a. Start star
b. Delimiter ;
c. End stop

Note: The delimiter is a semicolon.



7. In step 6 "Output", choose one of the two outputs and set it to Code found. This is optional and will make the LED on top of the ifm scanner flash (at the selected output), when a barcode has been scanned, which can be useful for troubleshooting.

6. Output
Define the function for each digital output.
Output 1
Code found

After setting up the hardware and configuring it using the ifm software, the barcode scanner is ready for use. Ensure that the products pass the trigger sensor with their barcodes fully visible to the barcode scanner.