

# INDUSTRIAL IoT AREAS

## ► Industry 4.0 and IoT



### Challenges in Industrial IoT Areas

- The basic idea of Industrial IoT is that the use of smart machines in production or logistics is a more cost-effective and effective solution compared to human labour.

### Our RFID Solution

- RFID technology helps to optimise these processes. The productivity and transport of goods is more efficient and better executable and traceable through the use of IIoT and RFID technology.

Industry 4.0 and IoT combine to form a unit in production or logistics. The aim of industrial IoT is to sustainably optimise the effectiveness and productivity of operational processes.

# INDUSTRIAL IoT AREAS



## ► RFID Solution in Warehouse and Production

### ADVANTAGES OF INDUSTRIAL IOT AND RFID:

- Goods in warehouses or containers are easier to find.
- In the case of sensitive goods in transit, routes can be traced in a traceable manner - to analyse the defects in goods.
- Production processes can be automated and changes can be adjusted in real time.
- Maintenance on machines can be recognised by the continuous data communication of the RFID reader with the output system.
- Production disturbances or failures are thus eliminated.
- At the same time, the use of RFID technology increases production capacity.
- With Industrial IoT, basic values are easier to record and control throughout the entire production process.

### Logistic Industrial IoT Processes:

The BLUEBOX Micro IA is an intelligent and easily integrated solution for logistics processes in the Industrial IoT environment thanks to its compact dimensions. This RFID reader with integrated antenna is an all-in-one solution for industrial IoT processes. The high reading range of up to 3 metres helps to allocate goods and freight in storage areas. BLUEBOX Micro IA can be easily connected to a forklift vehicle via the RS232 connection. The asynchronous serial interface RS485 is suitable for data communication over distances of up to 3 m in the warehouse.



### Industrial IoT Production Processes:

**BLUEBOX Cylindrical Reader M30 UHF** is a specially developed RFID Reader in M30 housing. The cylindrical shape and the various connection possibilities are unique on the market. Thanks to its form factor and M12 connection it can be easily integrated into production lines. The RS232 COM interface is ideally suited for connection to monitors, measuring devices or printers within production. RS485 interface is an asynchronous serial connection for data communication over long distances. It represents a bidirectionally usable bus system that can be operated with up to 128 devices on one bus.

# INDUSTRIAL IoT AREAS

## ► Various Interface Options for IIoT

The serial interface CANbus (SAE J1939 or CANopen) enables data exchange of information about goods and merchandise in storage racks or on production lines. Extended cable connections can be bypassed by this IoT interface. SAE J1939 works as a network protocol and transmits diagnostic data and control information for incoming and outgoing goods. CANopen is a communication protocol suitable for automation in warehouse or production processes. Complex devices and systems can be networked with it.

The reading of memory banks on RFID tags can be automated with the help of our demo software. Two different speeds can be selected for continuous reading. The data is sent as BLUEBOX telegram or ASCII format. It is also possible to read out further data from any memory bank. For example, product name, batch number, temperature or storage location can be automatically output



# INDUSTRIAL IoT AREAS

► Industry 4.0 and IoT



More Information on our website:

[en.idtronic-rfid.com](http://en.idtronic-rfid.com)

iDTRONIC GmbH

Ludwig-Reichling-Straße 4

67059 Ludwigshafen