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Industry 4.0 and IoT RFID Readers

RFID Solutions for Industrial IoT Processes in Warehouse and Production



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. Our RFID readers for industrial sectors are suitable for data communication thanks to integrated interfaces such as **RS232/485 or CANbus (SAE J1939 or CANopen)**. The **industrial plug connection M12** is the standard connection for industrial machines or devices.

► Advantages of Industrial IoT (IIoT) and RFID Technology

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. 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. 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 immediately 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.



► BLUEBOX MICRO IA for 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.

► BLUEBOX Cylindrical Reader M30 UHF for IIoT 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.

► Various Interface Options for IoT Environments

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.

► Including Software Development Kit

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.

► More **Product Information**

BLUEBOX Micro IA UHF



[Product Page](#)

Cylindrical Reader M30 UHF



[Product Page](#)

► **iDTRONIC's SERVICE FEATURES**



Let us know your demanding requirements for Auto-ID/RFID products. We have set ourselves the goal of breaking through the limits of today's technologies and setting new standards. We are ready to work with you to develop the right hardware for your application and product idea. Together with you we implement your individual requirements in the shortest possible time.

Our expertise in IIoT / RFID will help you bridge the gap between an idea and a visionary product. Besides the modification of existing hardware and software products, we are also prepared to offer you completely new developments.

Our core competencies are:

- Hardware modifications and developments
- Antenna designs for on and off metal applications
- Robust designs for dedicated application environments
- Firmware modifications and developments

PLEASE CONTACT US IF YOU HAVE QUESTIONS ABOUT OUR PRODUCTS



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