

Ludwigshafen, 14 October 2020

## Maintenance in Industry 4.0 Environments

RFID MDM Solutions for an effective and valid maintenance of machines



The **maintenance** is an important process within productions in Industry 4.0. The analysis of past data is important for proper testing and measurement. Our **G3 RFID Tablets** are an optimal RFID tablet computer solution for maintenance of machines and devices. The **integrated RFID HF NFC function** reads important data stored on the RFID tags. We offer a tablet computer solution for **Windows** and **Android** users.

### ► Organisation of Maintenance Activities

The documentation and recording of devices and machines is an important step before maintenance. Machines and devices must be equipped with **RFID tags or RFID labels** for identification. The description with information is provided by the Tablet PC - using the **integrated HF | NFC reader**. It is important to record the **device data as well as the inspection**



**times and inspection characteristics.** Through the integrated multiple **communication possibilities: WiFi, Bluetooth or LTE 4G**, it is possible to transmit data directly to an external system. The use of **Mobile Device Management (MDM)** systems makes it easier to store and edit data and to secure company files on the device. Regardless of whether the files are in the cloud or on the internal company network. For intranet security, an MDM provides a holistic solution for securing and controlling access rights to the intranet.

## ► Revision of **Machines and Devices**



The inspection of the machines and devices **creates an efficient and valid maintenance process** by using mobile tablet computers. Many machines and devices requiring maintenance are often located in large production halls. The Tablet PC only detects the device to be inspected within the **near field reading range of up to a maximum of 4.5 cm**. The testing of devices or machines can be carried out easily and quickly with an **MDM system**. Several inspectors can access, modify, or change the data on different tablet computers. The **documentation of defects or errors in the form of an image** is possible with the integrated **8-megapixel camera**. This has the advantage that the problem is immediately apparent, and a possible error analysis can be carried out immediately.

## ► Documentation and Transfer of **Test Results**

Thanks to the MDM system it is possible to edit, document and record the tested parameters, test data and devices at any time. The tablet computers are **optionally available with a desktop cradle with industrial RS232 and Ethernet interface**. The evaluated test results are thus directly transferable to the respective industrial machine. A **car cradle is also available as an option for direct connection** to forklift trucks as part of the maintenance of warehousing processes.



## ► Definition and Implementation of **Measures and Repairs**



The derivation of measures resulting from the maintenance process is easy to define with the linked test parameters. Possible repairs can be carried out immediately thanks to the **photo documentation** - the search for an objective fault on the device or machine is no longer necessary. The transfer of all test data and measures is possible without data loss by using a mobile tablet computer and the MDM system. The maintenance manager can forward the data directly to the responsible person. This facilitates the traceability of the implementation measures. The time factor plays a decisive role when using a Tablet PC. The working time of the employees is reduced and there is more time for operative processes within the company.

## ► More **Product Information**

### **G3 Android Tablet**



**Product Information**

### **G3 Windows Tablet**



**Product Information**

## Overview about our **RFID Tags and RFID Label Portfolio**

**Product Information**

## ► **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 IoT / RFID will help you bridge the gap between an idea and a visionary product. Besides the modification of existing hard- and software products we are also ready to offer you complete new developments.

### **Our core competencies are:**

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

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**CONTACT US FOR MORE INFORMATION TO OUR PRODUCT PORTFOLIO**



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