

Ludwigshafen, 17. March 2020

► iDTRONIC's EMBEDDED LF READER M890 | M900 ◀

High-Performance Near-Field RFID Read & Write Modules for Industry 4.0

iDTRONIC, the leading supplier of embedded RFID modules, has developed a new RFID LF module series. The RFID LF modules, which are especially suitable for **near-field environments**, have been designed adhering to current **industry 4.0 and IoT** trends. The **RFID LF Module M890** is the core of the new RFID LF module series. The **RFID LF M900 Module** enhances the M890 RFID module for SMD productions. Both modules may be embedded **into machines, devices or assembly lines**. They're ideal for **demanding IoT applications** in access control or access areas within productions.

► RFID LF MODULE M890



The image shows a blue printed circuit board (PCB) for the M890 LF RFID module. It features various electronic components, including a central chip, capacitors, and a USB connector. A 'NEW' banner is in the top right corner. The iDTRONIC logo is in the top left. Text on the board includes 'M890 LF', 'RFID EMBEDDED MODULES', 'INDUSTRY 4.0', 'IoT', and 'TTL | USB VCP | RS232' and '125 kHz or 134.2 kHz'.

The **RFID LF Module M890** has a **single-facing layout**, suitable for an optimal embedding into various applications. This RFID LF Module is available as a **TTL or an RS232 Version and is especially applicable for industrial processes**. The **USB VCP Version** was developed for **applications within IoT environments**. The RFID Embedded Module is equipped with **soldering pads** and is inserted into existing devices by **soldering**. In low power mode the RFID module consumes only 1 mA.

► RFID LF MODULE M900



The image shows a smaller blue PCB for the M900 LF RFID module. It features various electronic components, including a central chip, capacitors, and a USB connector. A 'NEW' banner is in the top right corner. The iDTRONIC logo is in the top left. Text on the board includes 'M900 LF', 'RFID EMBEDDED MODULES', 'INDUSTRY 4.0', 'IoT', and 'TTL INTERFACE' and '125 kHz or 134.2 kHz'.

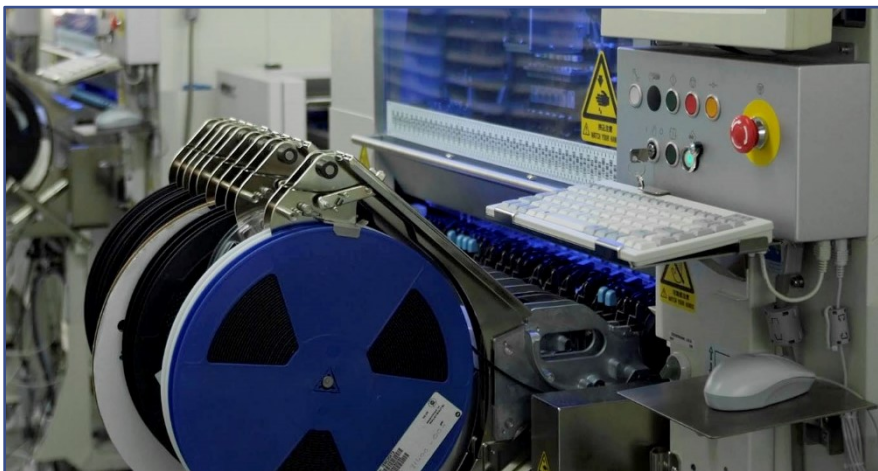
The **RFID LF Module M900** is a tiny-size OEM module for embedding into applications with less space. The RFID LF Module is available with an **TTL interface for industrial connections**. The module is especially useful in **SMD productions**. It is equipped with **soldering pads** and is inserted into existing devices by **soldering**. Optionally, it is suitable as an **extension solutions for the RFID LF Module M890**. In low power mode the RFID module consumes only 1 mA.

► NEAR-FIELD ENVIRONMENTS WITH LOW READING RANGES

The RFID LF Module Series is an optimal **RFID solution** for **communication in near-field environments**. The **integrated RFID LF Frequency is available as 125 kHz standard**. A **134.2 kHz version is available with a purchase of 50 or more units**. The RFID LF Modules achieve **reading ranges of up to 10 cm**. They support the **Read Only Chips: EM4100, EM4200, TK4100 and FDX-B**. The RFID LF Module can create **ISO/IEC 11784/11785 from Hitag-S transponders**. They also support **all functions of the Hitag family**. The RFID LF Modules are equipped with an **external antenna port** with Molex connector. We also offer a wide range of compatible antennas.

► APPLICATION EXAMPLE: SMD PRODUCTIONS

The RFID LF Modules are especially suitable for **SMD productions**. On request, we offer the RFID modules on a **Tape & Reel**. SMD components are suitable for SMT (Surface Mount Technology) assembly systems. These robot machines were developed especially for SMD components. They are used for precise placement of integrated circuits onto printed circuit boards. These, in turn, are used in computers, as well as industrial, medical, automotive, military and telecommunications equipment.



(Image Source: https://commons.wikimedia.org/wiki/File:Juki_KE-2080L_by_Megger.jpg#/media/File:Juki_KE-2080L_by_Megger.jpg)

A placement head usually sucks an RFID module out of the Tape & Reel by vacuum, checks the position by means of a camera system, calculates the angle and position and places the RFID module on the printed circuit board. The RFID module is then soldered onto the printed circuit board.

► iDTRONIC's SERVICE FEATURES

The **RFID LF Modules** are developed with a **software development kit** for Windows systems. Using the SDK simplifies the connection to your existing systems.

► **Software Development Kit:** [Download](#)

***You need your own firmware for your application?
On request iDTRONIC offers customer specific adaptations of the firmware.***

Product Information: [RFID LF Module M890](#) | [RFID LF Module M900](#)

**PLEASE FEEL FREE TO CONTACT US WITH
QUESTIONS ABOUT OUR PRODUCT PORTFOLIO**



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