

# UHF Developer Kits



## Features

- Choice of 3 Module Kits
- New Gen. Embedded UHF
- All necessary Hard- & Software
- Plug & Play test board
- Multiple Antennas
- Selection of useful Tags
- Complete SDK

## RFID Options

- UHF (EPC C1 GEN2 / ISO18000-6C)

As a trusted industry leader, iDTRONIC provides a unique platform of Embedded UHF RFID Modules for the use of RFID technology in our customers' applications or hardware. For customers who are just beginning to integrate RFID as a feature into their products, we offer these UHF Developer Kits with our newest Embedded RFID Modules. Each Kit is designed to be easy to use out of the box and lower the barrier to develop your RFID application as much as possible. The available software tools in our development kit allow a quick proof of concept development while integrating RFID into any applications or products.

iDTRONIC's UHF Developer Kits feature all necessary hardware and software components to start testing the Modules. All different Developer Kit versions are equipped with the chosen Embedded UHF RFID Module, an USB Plug&Play test board, a range of antennas, all necessary cables, a selection of useful UHF RFID tags and a USB stick with the complete SDK & documentation.

Our powerful SDK provides all the important functions like code examples for C# / C++ and the support of a serial command protocol. The demo software offers a wide range of possible tuning and testing methods while supporting all common Windows operating systems like XP, Vista, 7 & 8.

iDTRONIC's UHF Developer Kits offer highly valuable and unique resources to a large number of integrators seeking a simple way to integrate RFID into their ideas

## Technical Data

### M800 Starterkit

#### Electrical Specifications

|                     |   |
|---------------------|---|
| Power Supply        | 5 VDC ( $\pm 5\%$ regulated)                              |
| Power Rating        | max. 1.75W  |
| Operating Frequency | 840 – 960 MHz,<br>software programmable                   |
| Max. Power          | max 20dBm / 100mW,<br>software programmable in 1dBm steps |
| Operating Distance  | up to 1.5 meters*   |
| Antenna Connector   | U.FL connector  |
| Inputs / Outputs    | 2 inputs / outputs<br>software configurable               |
| Status              | 2 LEDs  |
| Interfaces          | TTL (0-5V)<br>RS232                                       |

#### Mechanical Specifications

|            |                        |
|------------|------------------------|
| Dimensions | 30.56 x 38.40 x 6.50mm |
|------------|------------------------|

#### Technical Details - Base Plate

|            |   |
|------------|---|
| Dimensions | 71 x 50 x 10mm  |
| Interface  | USB   |
| Power      | 5 VDC ( $\pm 5\%$ regulated) via USB<br>or external Powersupply |
| Status     | Buzzer & LED  |

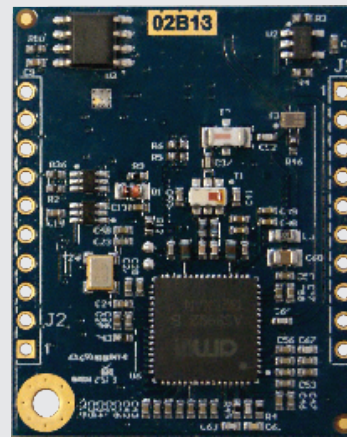
#### Supported Standards / Tags

|  |
|--|
| Standard ISO 18000-6C (EPC Class 1 Generation 2) |
|--|

\*Reading distance depends on tag, antenna and environmental conditions

#### Content

|   |
|---|
| M800 Module TTL (1x)                              |
| USB Base Plate (1x)                               |
| USB Cable (1x)                                    |
| UFL $\rightarrow$ SMA Converter (10cm Cable) (1x) |
| Antenna Cable SMA/SMA (3meter) (1x)               |
| Antennas (10cm Cable with SMA Connector) (4x)     |
| OEM-UHF-A901-GP-SMA                               |
| OEM-UHF-A902-GP-SMA                               |
| OEM-UHF-A903-GP-SMA                               |
| OEM-UHF-A904-GP-SMA                               |
| Sample Tag Package (1x)                           |
| SDK USB Stick (1x)                                |



## Technical Data

### M900 Starterkit

#### Electrical Specifications

|                     |   |
|---------------------|---|
| Power Supply        | 5 VDC ( $\pm 5\%$ regulated)                              |
| Power Rating        | max. 800mA  |
| Operating Frequency | 840 – 960 MHz,<br>software programmable                   |
| Max. Power          | max 27dBm / 500mW,<br>software programmable in 1dBm steps |
| Operating Distance  | up to 5.5 meters*   |
| Antenna Connector   | U.FL connector  |
| Inputs / Outputs    | 2 inputs / outputs<br>software configurable               |
| Status              | 4 LEDs  |
| Interfaces          | TTL (0-5V)<br>RS232                                       |

#### Mechanical Specifications

|            |                        |
|------------|------------------------|
| Dimensions | 30.56 x 38.40 x 6.50mm |
|------------|------------------------|

#### Technical Details - Base Plate

|            |   |
|------------|---|
| Dimensions | 71 x 50 x 10mm  |
| Interface  | USB   |
| Power      | 5 VDC ( $\pm 5\%$ regulated) via USB<br>or external Powersupply |
| Status     | Buzzer & LED  |

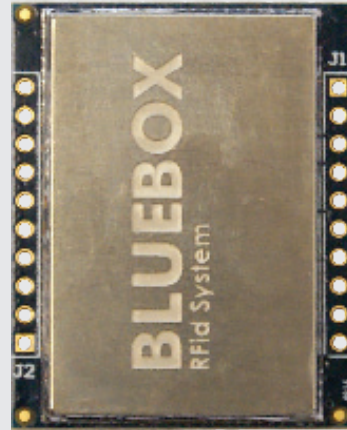
#### Supported Standards / Tags

|  |
|--|
| Standard ISO 18000-6C (EPC Class 1 Generation 2) |
|--|

\*Reading distance depends on tag, antenna and environmental conditions

#### Content

|   |
|---|
| M900 Module TTL (1x)                              |
| USB Base Plate (1x)                               |
| USB Cable (1x)                                    |
| UFL $\rightarrow$ SMA Converter (10cm Cable) (1x) |
| Antenna Cable SMA/SMA (3meter) (1x)               |
| Antennas (10cm Cable with SMA Connector) (5x)     |
| OEM-UHF-A901-GP-SMA                               |
| OEM-UHF-A902-GP-SMA                               |
| OEM-UHF-A903-GP-SMA                               |
| OEM-UHF-A904-GP-SMA                               |
| R-IN-UHF-9021U                                    |
| Sample Tag Package (1x)                           |
| SDK USB Stick (1x)                                |



## Technical Data

### M950 Starterkit

| Electrical Specifications |   |
|---------------------------|---|
| Power Supply              | 5 VDC ( $\pm 5\%$ regulated)                          |
| Power Rating              | max. 10W @RFOUT=30dBm                                 |
| Operating Frequency       | 840 – 960 MHz,<br>software programmable               |
| Max. Power                | max 30dBm / 1W,<br>software programmable in 1dB steps |
| Operating Distance        | up to 10 meters*                                      |
| Antenna Connector         | 4 U.FL connector (50 $\Omega$ )                       |
| Inputs / Outputs          | 2 inputs / outputs<br>software configurable           |
| Status                    | 8 LEDs  |
| Interfaces                | TTL (0-5V)<br>RS232                                   |

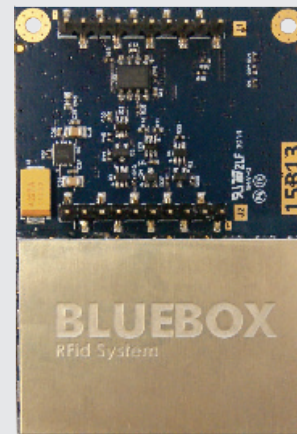
| Mechanical Specifications |                        |
|---------------------------|------------------------|
| Dimensions                | 66.00 x 45.00 x 6.50mm |

| Technical Details - Base Plate |   |
|--------------------------------|---|
| Dimensions                     | 71 x 50 x 10mm  |
| Interface                      | USB   |
| Power                          | 5 VDC ( $\pm 5\%$ regulated) via USB<br>or external Powersupply |
| Status                         | Buzzer & LED  |

| Supported Standards / Tags                       |  |
|--|--|
| Standard ISO 18000-6C (EPC Class 1 Generation 2) |  |

\*Reading distance depends on tag, antenna and environmental conditions

| Content   |  |
|---|--|
| M950 Module TTL (1x)                              |  |
| USB Base Plate (1x)                               |  |
| USB Cable (1x)                                    |  |
| Power Supply 5VDC (1x)                            |  |
| UFL $\rightarrow$ SMA Converter (10cm Cable) (4x) |  |
| Antenna Cable SMA/SMA (3meter) (4x)               |  |
| Antennas (10cm Cable with SMA Connector) (8x)     |  |
| OEM-UHF-A901-GP-SMA                               |  |
| OEM-UHF-A902-GP-SMA                               |  |
| OEM-UHF-A903-GP-SMA                               |  |
| OEM-UHF-A904-GP-SMA                               |  |
| R-IN-UHF-9021U (4x)                               |  |
| Sample Tag Package (1x)                           |  |
| SDK USB Stick (1x)                                |  |



## Order Codes

| Version               | Order Code          |
|-----------------------|---------------------|
| M800 Starterkit TTL   | OEM-UHF-M800-TTL-SK |
| M900 Starterkit TTL   | OEM-UHF-M900-TTL-SK |
| M950 Starterkit TTL   | OEM-UHF-M950-TTL-SK |
| M800 Starterkit RS232 | OEM-UHF-M800-232-SK |
| M900 Starterkit RS232 | OEM-UHF-M900-232-SK |
| M950 Starterkit RS232 | OEM-UHF-M950-232-SK |

iDTRONIC GmbH  
Donnersbergweg 1  
67059 Ludwigshafen  
GERMANY

Phone +49 (0) 621 66 90 09 4-0  
Fax +49 (0) 621 66 90 09 4-9  
E-Mail: info@idtronic-rfid.com  
Web: idtronic-rfid.com

For further information & prices, please contact info@idtronic-rfid.com

Subject to alteration without prior notice  
©2016 iDTRONIC GmbH