



**I-PICK**  
**868 MHz RFID Handheld**  
**Product Information**

iDTRONIC GmbH  
Donnersbergweg 1  
67059 Ludwigshafen  
Germany/Deutschland

Phone: +49 621 6690094-0  
Fax: +49 621 6690094-9  
E-Mail: [info@idtronic.de](mailto:info@idtronic.de)  
Web: [idtronic-rfid.com](http://idtronic-rfid.com)

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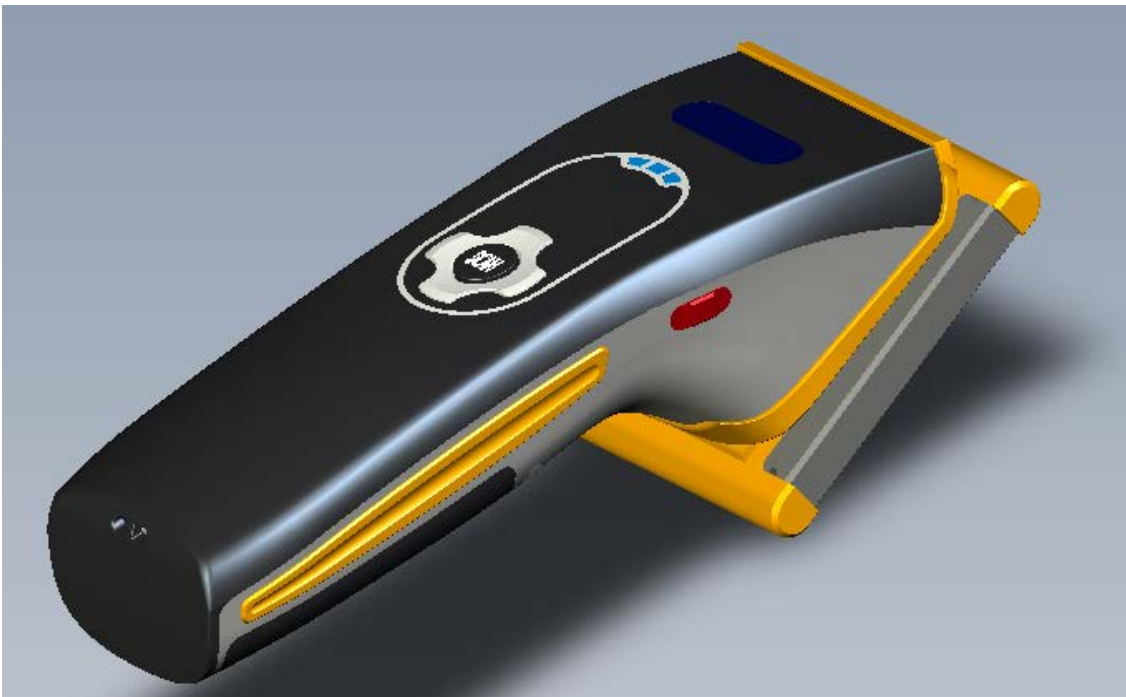
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## 1 Introduction

### 1.1 Product Overview

The I-PICK is designed with high cost performance and rugged features. The I-PICK is a portable data collection terminal (Hand-Held Terminal: HHT, common name" industry PDA" or portable handheld computer) and can work in harsh environment.



*Figure 1 I-PICK in handling orientation*

The I-PICK can be customized to different mobile application solutions, which can meet the requirements of different industry. It can be used in warehouse management, transportation management, supply chain management, retail management, asset management, production line management, materials tracking, product quality tracking, routing inspection outdoor operations and so on.

## 1.2 Appearance & Ports

The I-PICK handheld appearance as below, it uses ABS shell with dustproof prevent design, can be used in indoor or outdoor even in rain.

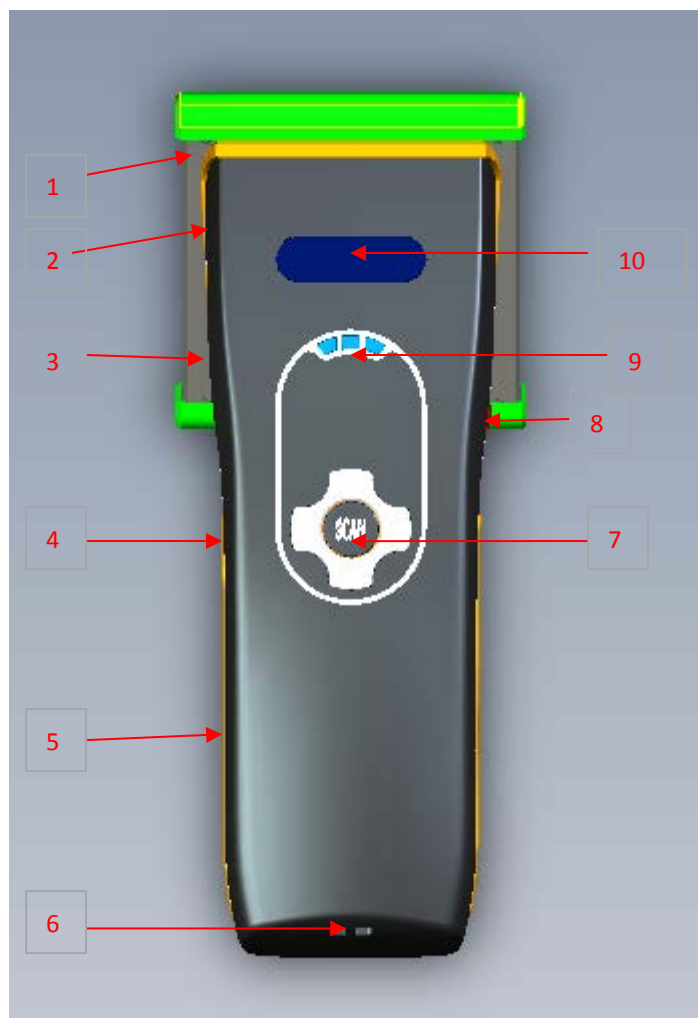


Figure 2 Layout of the I-PICK

### Legend:

1. External antenna: Ceramic antenna, 5 dBi gain. When using the external antenna, Internal antenna is invalid.
2. Internal Antenna: Ceramic antenna, 3 dBi gain. when using the internal antenna, External antenna is invalid.
3. USB port: Micro USB
4. Cushion against falls
5. Battery slot
6. Lanyard hole
7. Scan button
8. Power on/off
9. Indicator light
10. Logo

### 1.3 Product Features

#### Easy to use and various function

The I-PICK is with easy to use and ergonomic design. It can read ISO18000-6C labels, with Flash memory, Bluetooth communication and other functions.

#### Get date in Real-time

The I-PICK can transfer the data to mobile PC by Bluetooth in real time, and support offline transmission as well

#### Durable in use

The I-PICK is in rugged design, IP-53, it can endure many times drops from 1.2 m high to the concrete floor, and can operate from -10 °C to +50 °C.

#### Multiple ports

It can communicate with PC via USB port or Bluetooth according to the user's requirements, If connect with barcode printer, that can printed data in real time

#### High memory capacity

The I-PICK has 1GB memory space built-in and automatically saves data. The stored data remains even without power supply.

### 1.4 Package list

Please check the follow accessories before use:

- The CD-ROM for instruction manual
- The follow hardware accessories

#### 1.4.1 Accessories



Figure 3 USB Cable



Figure 4 Battery pack



Figure 5 Battery charger

## 1.5 Performance index

- ISO18000-6B /ISO18000-6C
- Frequency: 860–960MHz
- Work type: FHSS or fixed frequency
- Output power: 20–30 dBm
- Read/write: read distance > 3 m, write distance > 0.5 m (depend on antenna and tag))
- Support the automatic data storage
- Support real-time and offline data transmission
- Memory size: 1 GB
- Standard battery: 3.7 V, 3200 mAh Li-on battery
- Communication ports: Bluetooth port Class2 V1.1/USB interface
- Dimension: 192.5 x 76 x 52 mm

## 2 Troubleshooting

### 2.1 Bluetooth malfunction

| Problem                                    | Solution   |
|--|--|
| Unable to search Bluetooth device          | Turn on the reader but mobile PC still can no search Bluetooth via Bluetooth adapter and equipment, switch power and boot again but still can't search Bluetooth. It needs to be returned to repair it, this condition happens seldom. |
| Bluetooth connection fault                 | Connections need password, Bluetooth device password is 0000.  |
| Bluetooth signal not stable, Drops serious | Just connect Bluetooth but off immediately, try to close to Bluetooth adapter and connect again.   |

### 2.2 Other malfunction

| Problem                 | Solution   |
|-------------------------|--|
| Battery does not charge | If can not charge, we can check is it a battery problem or charge dock problem. Our solution is put this battery to a good charge dock; put a good battery to this charge dock. About the dock charge, we put a good battery in this equipment and check the indicator. P and C display red when charging and turn green when power sufficient. When charging, we can put the battery in another equipment and check if the power increase or not. If the indicator turns green when power not enough or power does not increase, then need to change a charge dock. |
| Unbootable              | When unable to boot, first check the battery power   |
| No sound                | If volume setting is no problem, check whether is problem on loudspeaker cable on back cover connect, or connector is rupture.   |

### 2.3 RFID malfunction

| Problem                         | Possible Cause   | Solution  |
|---------------------------------|--|---|
| Cannot read card                | The antenna disconnect                                 | Check antenna connection  |
|                                 | Beyond reading range                                   | Move the card near the module antenna   |
|                                 | Antenna damaged  | Change antenna  |
|                                 | RF Power value too low                                 | Recover default parameter   |
|                                 | Tag damaged  | Change other tag  |
|                                 | Module damaged   | Contact supplier  |
| Cannot connect to reader module | No power   | Check power supply connector and adaptor DC.  |
|                                 | Com port occupied or damaged                           | Check the com port by software, checking if it is occupied and getting COM port. communication INFO |
|                                 | Flat cable damaged or no connect well                  | Change flat cable or check its connection   |
|                                 | Baud rate is not Correct                               | Set the baud rate through software  |
|                                 | Module damaged   | Contact supplier  |
| Read distance is short          | Antenna is not connect well                            | Check the antenna connection  |
|                                 | RF Power value too low                                 | Recover default parameter   |
|                                 | The polarization of the tag and antenna is not matched | rotate the tag 90 degrees   |
|                                 | Module damaged   | Contact supplier  |
|                                 | Tag damaged  | Change other tag  |



### **3 Maintenance**

#### **3.1 Precautionary Maintenance**

In principle, the device is maintenance-free. When correctly installed they operate for many years without any problems. Regular checking of all ports and cables belonging to the system is recommended. Unstable connections could lead to damage and malfunctions of the system and therefore should be repaired as soon as possible.

##### **Checklist for regular checks**

- Are all casing intact?
- Are all cables intact?
- Are all connectors intact?
- Are all connectors securely fastened?
- Are all screws still tight?
- Is there suddenly a malfunction at a specific unit?

#### **3.2 Firmware Update**

The firmware is stored in a FLASH memory and can be updated.

#### **3.3 Repairs, Returns**

The device is a complex electronic gadget on which the customer cannot carry out repairs. Don't try to repair units or open the housing.

Electronic parts or main components returned for repair or exchange must be handled with great care. PCBs or electronic parts must be returned in the appropriate ESD-protecting packaging material. If you send parts for repair, please add a short error description at least. This helps us to do the repair fast.

iDTRONIC GmbH  
Donnersbergweg 1  
67059 Ludwigshafen  
GERMANY/ALLEMAGNE

**4            Appendix**

**4.1           Document Revisions**

| Date          | Version   | Description |
|---------------|-----------|-------------|
| 20. Nov. 2013 | 0.1 (1.0) | First issue |

**4.2           Table of Figures**

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