IDENTIFICATION

FEIG

USER GUIDE

ID ECCO Smart 2D-HF-BLE

solid NFC Booster with BLE Interface

Note

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With the edition of this document, all previous editions become void. Indications made in this manual may be changed without previous notice.

Composition of the information in this document has been done to the best of our knowledge.
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The instructions given in this manual are based on advantageous boundary conditions.
FEIG ELECTRONIC GmbH does not give any guarantee promise for perfect function in cross environments and does not give any guarantee for the functionality of the complete system which incorporates the subject of this document.

FEIG ELECTRONIC GmbH calls explicit attention that devices which are subject of this document are not designed with components and testing methods for a level of reliability suitable for use in or in connection with surgical implants or as critical components in any life support systems whose failure to perform can reasonably be expected to cause significant injury to human health. To avoid damage, injury or death the user or application designer must take reasonably prudent steps to protect against system failures.

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Contents

1 Safety Instructions

- Please read this user guide carefully and follow the given instructions and safety instructions before using the device.
- The device may only be used for the intended purpose designed by the manufacturer.
- The operation manual should be conveniently kept available at all times for each user.
- Unauthorized changes and the use of spare parts and additional devices which have not been sold or recommended by the manufacturer may cause fire, electric shocks or injuries. Such unauthorized measures shall exclude any liability by the manufacturer.
- The liability-prescriptions of the manufacturer in the issue valid at the time of purchase are valid for the device. The manufacturer shall not be held legally responsible for inaccuracies, errors, or omissions in the manual or automatically set parameters for a device or for an incorrect application of a device.
- Repairs may only be executed by the manufacturer.
- Installation, operation and maintenance procedures should only be carried out by qualified personnel.
- Use of the device and its installation must be in accordance with national legal requirements and local electrical codes.
- When working on devices the valid safety regulations must be observed.
- To avoid damage, do not drop the device and do not expose it to strong shocks.

- Use of controls or adjustments or performance of procedures other than those specified herein may result in exposure to hazardous visible laser light. The laser scanner utilizes a low-power laser diode. Although staring directly at the laser beam momentarily causes no known biological damage, avoid staring into the beam as one would with any very strong light source, such as sunlight. Avoid that the laser beam hits the eye of an observer, even though reflective surfaces like mirrors, etc.

Warning: LiPo battery: To reduce the risk of fire, explosion and burns:

- Do not crush, puncture, short circuit or place the LiPo battery in fire or water. To reduce the risk of fire or burns, do not attempt to open, disassemble, or service the battery pack. Do not expose the unit to temperatures above 60 °C (140 °F). Only charge the battery with the battery charger intended by the manufacturer. Do not deep discharge the battery. Do not use damaged batteries.
- Switch off your wireless device whenever you are instructed to do so by airport or airline staff. Consult airline staff and ask for the device's use in-flight.
- Wireless devices may affect medical electrical equipment. Therefore they should be switched off wherever you are requested to do so in hospitals or healthcare facilities to prevent interference with sensitive medical equipment.
- The device is not waterproof! Due to its IP64 protection class certification it is dust- and splash proof. However, avoid exposing the device to heavy rain.
- Special advice for carriers of cardiac pacemakers:
  Although this device doesn't exceed the valid limits for electromagnetic fields you should keep a minimum distance of 25 cm between the device or the antenna and your cardiac pacemaker.

2 Revision History of Documentation

Revision	Date	Description
0e	22.04.2021	Initial version
1e	15.06.2021	Add some installation hits USB driver, Virtual COM Port. LiPo battery
2e	01.07.2021	FCC & IC information update

3 Scope of delivery

- Mobile Reader ID ECCO Smart 2D-HF-BLE
- USB charging cable (USB connection cable)
- Quick Start ID ECCO Smart 2D-HF-BLE

4 Product Description

The ID ECCO Smart captures RFID data and barcode data for a variety of uses and transmits those to a host via USB connection or Bluetooth LE.

The ID ECCO Smart is used wherever the read range of an NFC smartphone is insufficient for efficient work with RFID transponders or the ambient conditions require a more robust device. The read data are transmitted directly via Bluetooth LE interface to a host such as a smartphone, tablet PC, laptop or Bluetooth LE capable Computer.

This document provides a basic instruction for starting the reader and connect the reader to iOS, Android and Windows 10 computers

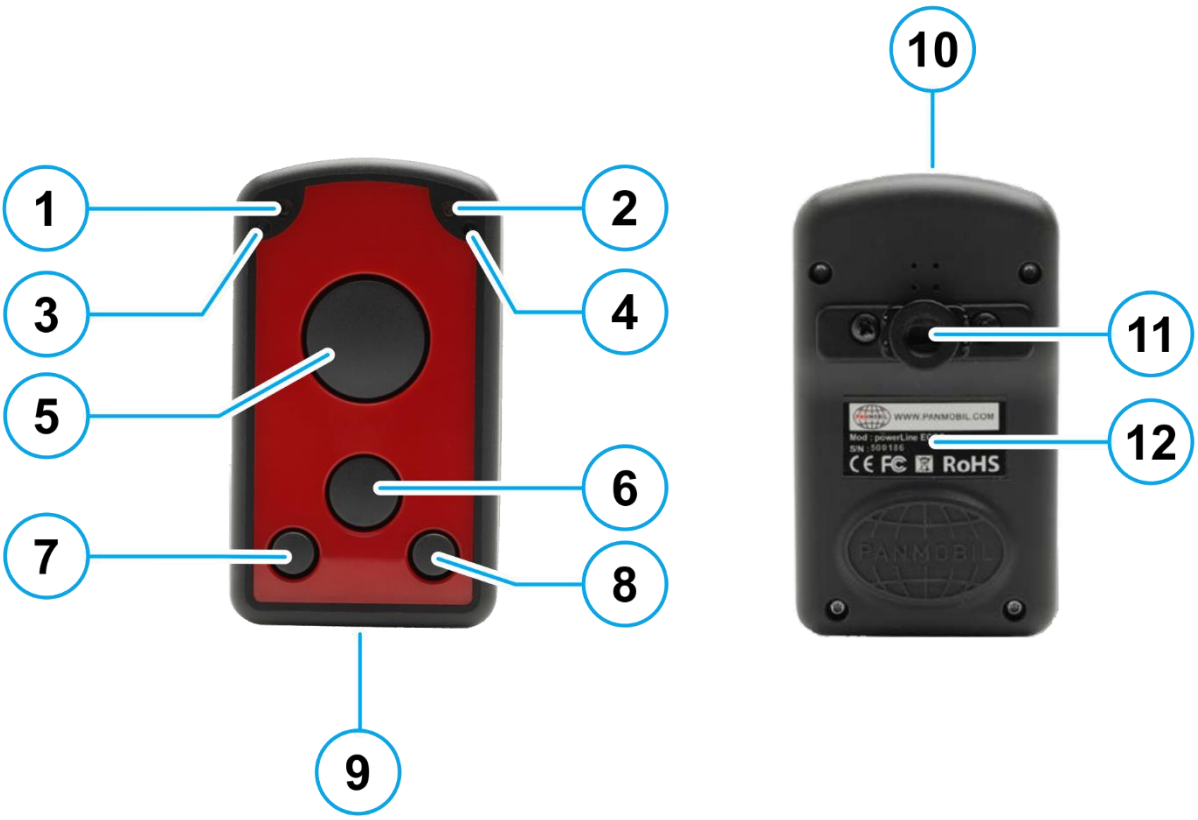


Fig. 1: ID ECCO Smart device overview

Label	Description	Function
1	Green LED	Lights up green if a RFID tag was read successfully.
2	Red LED	Lights up red if an Error was detected When the battery level is low, it flashes every 2 sec.
3	Yellow LED	Lights up red if connected to a battery charger (USB or power adapter). Red = Battery charging Off = Battery fully charged
4	Blue LED	Flashing fast when the ID ECCO Smart isn't connected via Bluetooth LE Flashing slowly when the ID ECCO Smart is connected via Bluetooth LE
5	Key 1 (trigger button)	Triggers the RFID reader for reading a transponder (optional)
6	Key 2 (custom)	Not used
7	Key 3	Press the keys 7 and 8 for 8 sec. to perform a Hardware Reset
8	Power ON/OFF button	Power key to turn the unit ON. Pressing this key for 3 sec. turns the unit OFF.

		Press the keys 7 and 8 for 8 sec. to perform a Hardware Reset
9	USB protection clip Mini-USB interface	Rubber clip to protect the Mini USB port. Main communication and battery charging interface.
10	Scanning window 1 RFID antenna	Protection glass for the barcode and RFID reader Antenna 1 for RFID reader/writer. To have the best reading performance, keep the glass clean and free of scratches.
11	Scanning window 2 RFID antenna	Antenna 2 for RFID reader/writer
12	Int. LiPo battery	Rechargeable LiPo battery 1300 mAh

5 Operation

5.1 Charging the Battery

Before the first operation, the battery should be fully charged by using the included USB charging cable. As long as the battery is charging the yellow LED will light solid yellow. After the battery is fully charged the yellow LED turns off. A full recharge of the battery takes approx. 3 to 4 hours.

To charge the battery via USB follow the instructions below:

- Remove the USB protection clip from the device.
- Connect the device to the USB port of a computer or to the USB power adapter (accessories).
- As long as the battery is charging, the yellow LED lights solid yellow.
- After the battery is fully charged the yellow LED turns off.

If a low state of charge of the battery is reached, the red LED flashes briefly every 2 seconds.

At not used devices, the reader switch to sleep mode. A full charged battery will be discharged after about 80- 90 days

5.2 Switch On/Off

To turn ON the Reader press Power key 8 for minimum 3 seconds. Pressing this key for 3 seconds, again, turns the unit OFF.

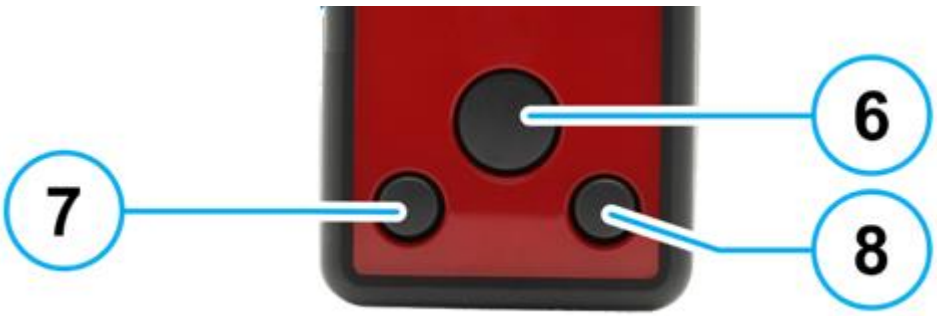


Fig. 2: Switch ON/OFF

5.3 USB – Interface

There is a Mini USB-socket 9 on the base for the connection of the USB-Interface. The pin out is standardized. The data rate is reduced to 12 Mbit (USB full speed). A standard USB-cable can be used.

Fig. 3: 9 - USB-Interface

Note:
The length of the USB-cable can be a max. of 5 meter. It isn't allowed to use longer cables!

5.4 Device Hardware Reset

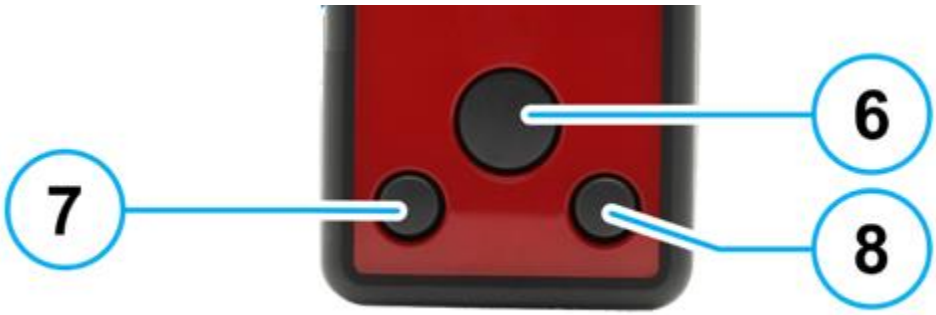


Fig. 4: Hardware reset: Press button no. 7 and 8

To perform a hardware reset of the ID ECCO Smart press and hold the keys 7 and 8 for minimum 10 seconds.

ⓘ ***NOTE:***

- ***Specific configuration settings and data will not be lost by the reset.***

6 Project Notes

6.1 RFID/NFC transponder detection

By sending an ISO 15693 command the reader read RFID/NFC data of the ISO 15693 compatible transponder.

The reader ID ECCO Smart has an integrated antenna and two main detection areas (green) to read tags in different orientations.

Also in the area between the detection areas (yellow), tags could be read in angular tag orientations. Because of the physical rules, to read or write on tags, a minimum strength of field lines has to go through the antenna coil of a transponder

Fig. 5: RFID detection areas (bottom & front) of the reader

The read range depends on different parameter like type of the tag IC, the size of the tag (antenna), quality of tag, orientation of the tag vs. antenna and the environment of the tags.

Typical values of the maximal read range are about 10mm for very small tags and about 90mm for ISO Card sized tags

The ideal reading distance and conditions are in case the tag orientation is parallel to plane of the two antennas in the reader.

Metal between the reader antenna and the tag or metal near the tag and reader antenna can reduce the read range.

Fig. 6: Read NFC tag in a LED driver with the bottom antenna

Fig. 7: Read NFC tag in a LED driver with the front antenna

6.2 Barcode Scanning

6.2.1 1D Laser

To scan a barcode follow the steps below:

1. Aim the scanner at the barcode.
2. Send the 0x01 Inventory command to the reader

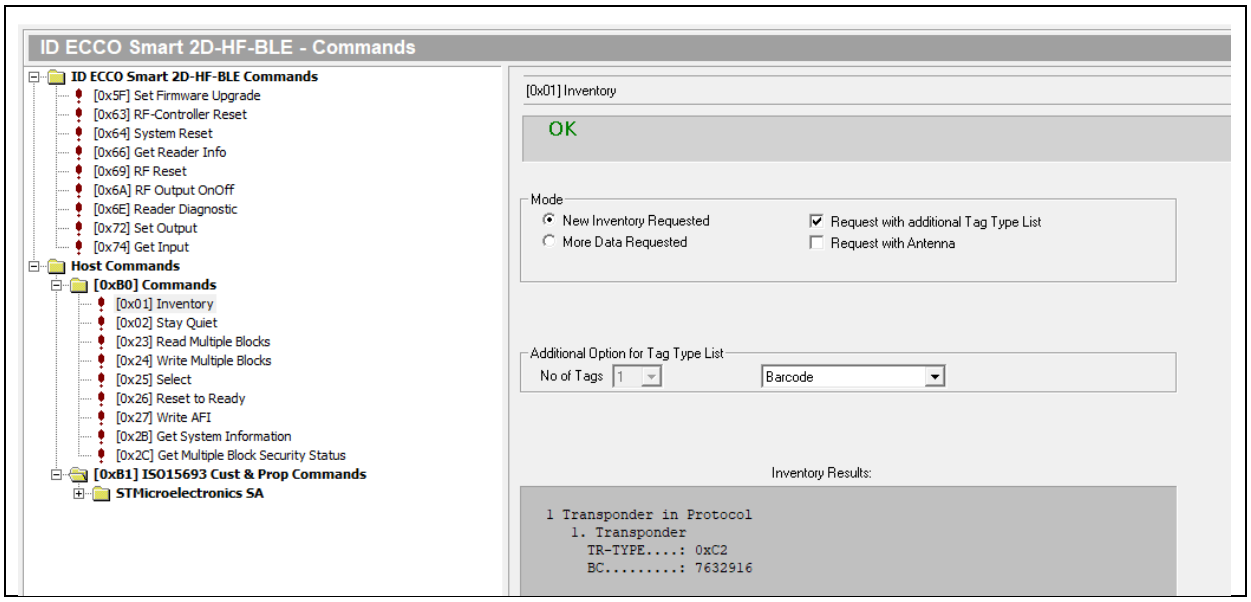


Fig. 8: Read barcode by Inventory command at ISO Start+

3. Ensure that the scanning line is directed straight at the barcode.
4. The ID ECCO Smart beeps and the green LED (1) lights up to indicate a successful decode.

Fig. 9: Barcode Scanner Alignment

6.2.2 1D/2D Imager

To scan a barcode follow the steps below:

1. Aim the scanner at the barcode.
2. Send the 0x01 Inventory command to the reader

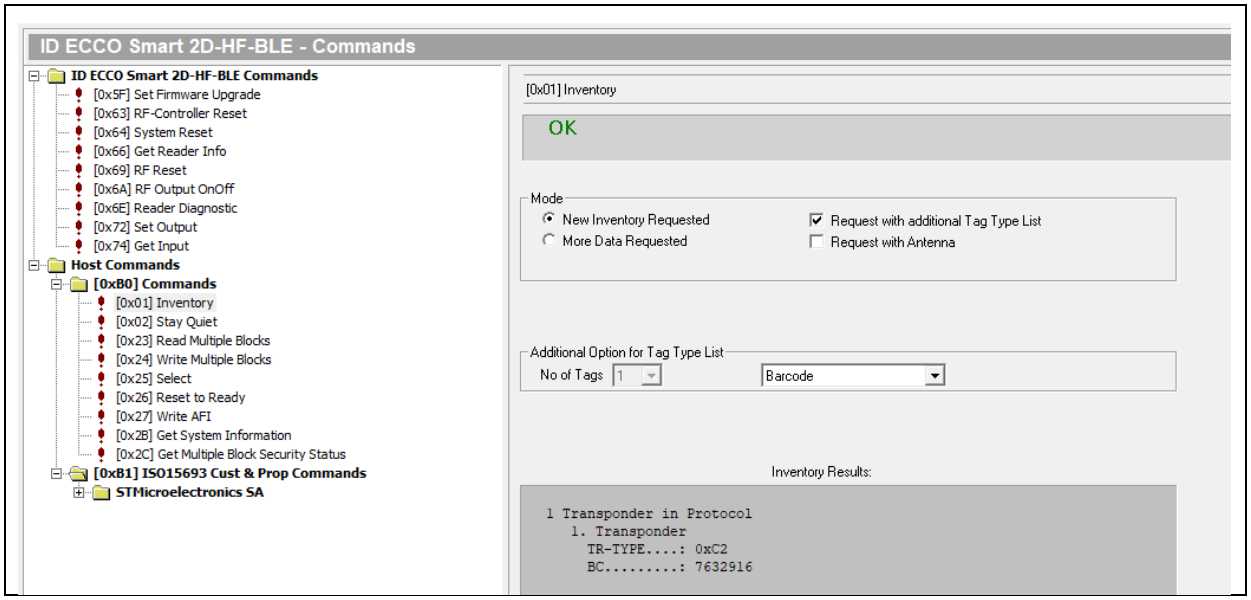


Fig. 10: Read barcode by Inventory command at ISO Start+

3. The ID ECCO Smart decodes the barcode closest to the cross center in the 2D cameras.
4. The device beeps and the green LED (1) lights up yellow to indicate a successful decode.

Fig. 11: Scan Example 1D/2D Imager

6.3 Bluetooth LE connection

The mobile reader ID ECCO Smart can be connected via Bluetooth Low Energy (BLE) interface to a device which is compatible with Bluetooth Low Energy Version 4.2 or higher such as a computer or smartphone.

The BLE interface of the ID ECCO Smart is according the standard Bluetooth Low Energy Version 4.2 und 5.0 compatible.

The ID ECCO Smart act as a “Peripheral” and send Advertising data after reboot or a lost connection with the “Central”. After connection process, the reader communicate with a central via the ID ECCO Smart BLE profile.

The Advertising include the UUID of the supported services, the “Shortened Local Name” ECCOSmar of the reader.

6.4 BLE Reader profile

The ID ECCO Smart BLE profile of the reader supports 6 different BLE services with 16 different BLE characteristics. The Service “NFC Reader Service” is a part of the standard Zhaga “Book 25”. For further information contact the Zhaga Consortium at https://zhaga.org/

Service Name	Characteristic Name	Service UUID	Supported Properties
Generic Access		0x1800	
	Device Name		READ WRITE
	Appearance		READ
	Peripheral Preferred Connection Parameters		READ
Device Information		0x180A	
	Manufacturer Name String		READ
	Model Number String		READ
	Serial Number String		READ
	Hardware Revision String		READ
	Firmware Revision String		READ
Generic Attribute		0x1801	
	Service Changed		INDICATE
Battery Service		0x180F	
	Battery Level		READ NOTIFY
FEIG UART Service		2d8f4660-8acb-11ea-ab12-0800200c9a66	
	FEIG Reader input		WRITE WRITE without response
	FEIG Reader output		READ NOTIFY INDICATE

Table 1: Bluetooth Low Energy Services of ID ECCO Smart BLE profile

The FEIG UART Service is used to transmit the FEIG Advanced Protocol. This BLE Service is used at the FEIG SDK’s and DLL and is compatible with the FEIG serial Interface.

Also the product ID BLE.USB Dongle support this Services

The Bluetooth Low Energy specifications and listed services see https://www.bluetooth.com

See “Book 25” from the Zhaga database (Available for Zhaga Members, only)

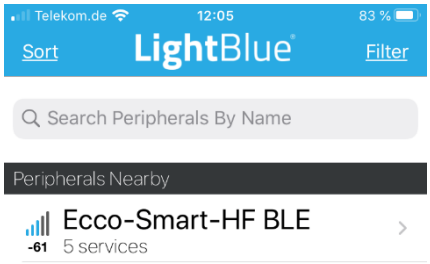
7 Bluetooth LE Connection with iOS mobile devices

To connect the mobile reader ID ECCO Smart via BLE to an iOS mobile device a customer specific APP for iOS is necessary.

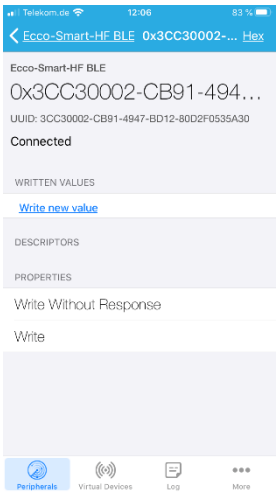
For first tests one of the different Apps for BLE in the iOS App Store could be used.

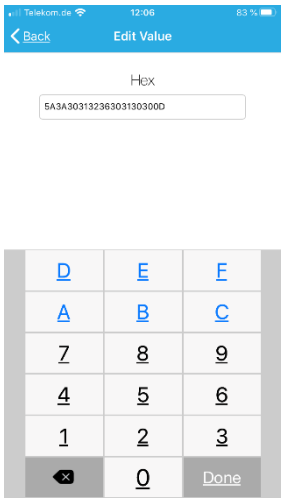
In this example, FEIG ELECTRONIC use BLE App of LightBlue®. (iOS Version 11.00 or higher is required)

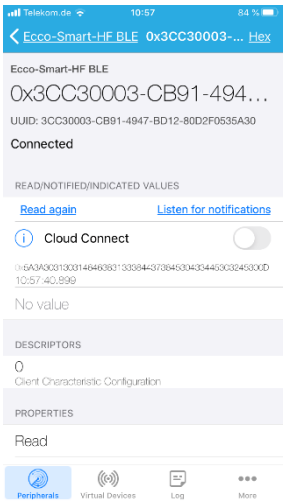
1. If the ECCO Smart is on, please switch it off.
2. Load the LightBlue® App from the App Store
3. Switch on the mobile reader ID ECCO Smart.
    a. The blue LED flashes with a frequency of about 1 Hz



4. Start the LightBlue® App
5. The ECCO Smart 2D-HF-BLE should be shown in the list of “Peripherals Nearby”
6. Select ECCO Smart 2D-HF-BLE to connect to the device
    a. The blue LED flashes slower with a frequency of about 2 Hz
7. The App show:
    a. The Advertising data by select the function “show”
    b. The Generic Access Service (UUID: 0x1800)
    c. The Generic Attribute Service (UUID: 0x1801)
    d. The Device Information Service (UUID: 0x180A)
    e. The Zhaga Book 25 NFC Reader Service (UUID: 3CC30001-CB91-4947-BD12-80D2F0535A30)
    f. The Battery Service (UUID: 0x180F)
    g. The FEIG ELECTRONIC serial communication service (UUID: 2D8F4660-8ACB-11EA-AB12-0800200C9A66)
8. By Select the NFC Reader Input Service and select “Write new values” you can send a command to the reader
9. By Select the NFC Reader Output Service and by use the property “Read” you can see the answer of the reader.







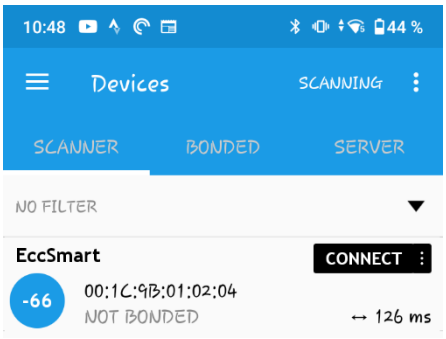
8 Bluetooth LE Connection with Android mobile devices

To connect the mobile reader ID ECCO Smart via BLE to an Android mobile device a customer specific APP for Android is necessary.

For first tests one of the different App in the App Store “Google Play” could be used.

In this example, FEIG ELECTRONIC use the App BLE Debugger

1. If the ECCO Smart is on, please switch it off.
2. Load the “BLE Debugger” App from the App Store
3. Switch on the mobile reader ID ECCO Smart.
    a. The blue LED flashes with a frequency of about 1 Hz
4. Start the BLE Debugger App
5. The ECCO Smart 2D-HF-BLE should be shown in the list
6. Select ECCO Smart 2D-HF-BLE to connect to the device
    a. The blue LED flashes slower with a frequency of about 2 Hz
7. The App show:
    a. The Generic Access Service (UUID: 0x1800)
    b. The Generic Attribute Service (UUID: 0x1801)
    c. The Device Information Service (UUID: 0x180A)
    d. The Zhaga Book 25 NFC Reader Service (UUID: 3CC30001-CB91-4947-BD12-80D2F0535A30)
    e. The Battery Service (UUID: 0x180F)
    f. The FEIG ELECTRONIC serial communication service (UUID: 2D8F4660-8ACB-11EA-AB12-0800200C9A66)



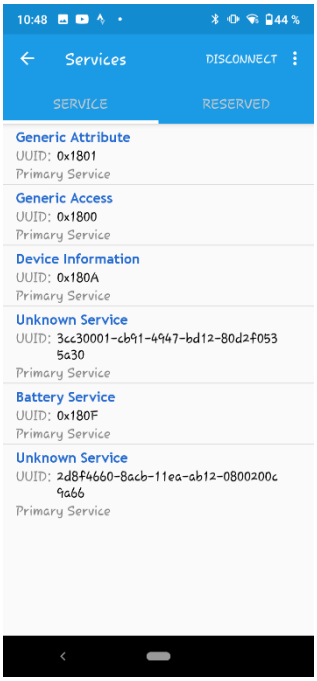


Fig. 12: List of ECCO Smart BLE Services at the App BLE Debugger

9 Connection with WIN10 PC

9.1 ISOStart+ Configuration and Test Tool

For reader configuration and general test the Configuration and Test Tool ISOStart+ and FEIG USB driver are available at the FEIG download area

At www.feig.de/login you can download the manual, driver and software.
Login details:
Username: eccosmart
Password: feig

9.2 Connection by USB

1. Install ISOStart+ and the FEIG USB driver on your PC
2. Check the USB driver switch is on mode “USB driver” (right mouse click on the icon in the taskbar)
3. Remove the USB protection clip from the device.
4. Connect the device to the USB port of a computer
5. If the ECCO Smart is off, please switch on, Wait till Win10 has recognized the device
6. Start FEIG Tool ISOStart+ V11.01.00 or newer
7. Click on the “Detect” button and the Reader Detection window will open
8. Set the communication interface to USB and click on the “Detect” button in the window
9. The Reader Detection window show the ID ECCO Smart 2D-HF-BLE and the actual firmware version

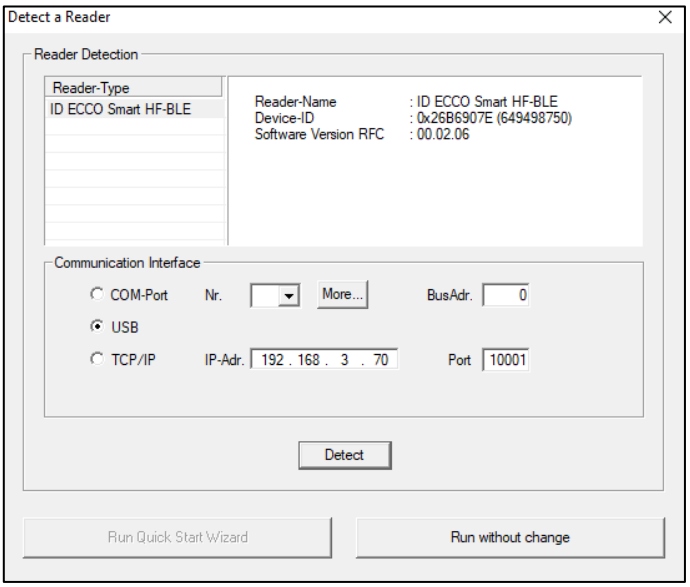


Fig. 13: Detect window if ISOStart+

10. Click on button “Run without change” and the Window for the detected reader will open
11. The use of the FEIG Tool ISOStart is described in H80301-e-ID-B.pdf.

9.3 ID BLE.USB Dongle

To connect the reader ID ECCO Smart via Bluetooth Low Energy (BLE) with a WIN 10 computer FEIG ELECTRONIC GmbH offer BLE – USB Dongle “ID BLE.USB” with an integrated FEIG Bluetooth LE V4.2 Data Service

This USB device allows to open a virtual COM port at the PC. In connection with the serial interface DLL (FECOM) of the FEIG SDK a BLE a connection can be established

Order Information see: *17.1 Accessories*

9.4 Connection by Bluetooth LE (BLE)

To connect the mobile reader ID ECCO Smart via BLE to a MS Windows (WIN 10) PC a FEIG USB Stick is necessary.

1. If the ISOStart+ not available on your PC, see chapter 9.1 ISOStart+ Configuration and Test Tool
2. If the ECCO Smart is on, please switch it off.
3. Connect the USB Stick to your PC. Wait till Win 10 has recognized to stick. Windows will generate a new virtual COM port for every new BLE.USB stick
4. If the ECCO Smart is off, please switch on
5. Start FEIG Tool ISOStart+ V11.01.00 or newer
6. Click on the “Detect” button and the Reader Detection window will open.

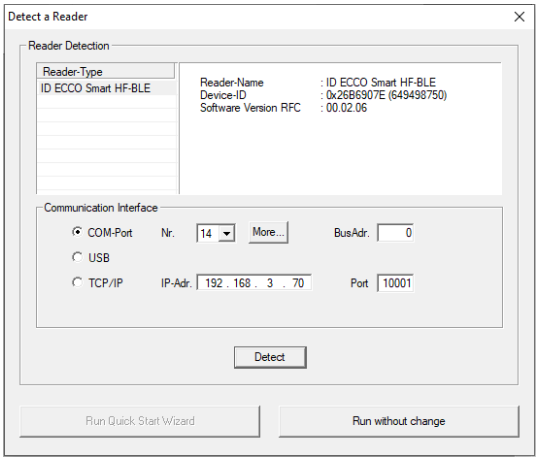


Fig. 14: Detect window if ISOStart+

7. Communication interface: Select the COM port (e.g. 14, in many cases, the highest available port number). Note: Every ID BLE.USB Dongle create a new vertical COM port at your PC
8. Click on the “More” button in the window Communication Interface, line COM-Port.
9. Enable DTR and RTS in the “for Serial to TTL Converter” windows and close the window.

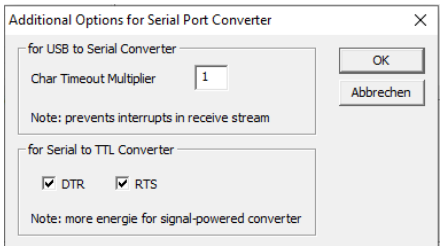


Fig. 15: Window Additional Options for Serial Converter

10. Click on the “Detect” button in the window.
11. The Reader Detection window show the ID ECCO Smart 2D-HF-BLE and the actual firmware version.
12. Click on button “Run without change” and the Window for the detected reader will open
13. The use of the FEIG Tool ISOStart is described in H80301-e-ID-B.pdf.

10 Reader configuration

By using the Configuration and Test tool ISOStart+ different reader configuration parameter and reader commands are available.

The description of the reader commands and the description of the function of the parameter, the default parameter are available at the system manual of the reader.

See: System Manual H02080-1e-ID-B.PDF or newer, available on the FEIG download area

11 Firmware Update

For firmware update, reader configuration and general test the Configuration and Test Tool ISOStart+ and FEIG USB driver are available at the FEIG download area. See also chapter 9.1 ISOStart+ Configuration and Test Tool

1. If the device is on, please switch it off.
2. Connect the ID ECCO Smart to a PC by using enclosed USB cable
3. Switch on the ECCO Smart
4. Start ISOStart+ and detect the reader
5. Click on Button Firmware Update
6. Follow the defined sequence of the tool (See also document: N30300-e-ID-B.pdf)
7. Switch of the device
8. After the next start, the reader will use the new firmware version

The FEIG Tools ISOStart+ V11.01.00 and USB driver can be downloaded from the download area of FEIG:

https://www.feig.de/en/login

Username: eccosmart
Password: feig

Fig. 16: Login Data, FEIG Download area

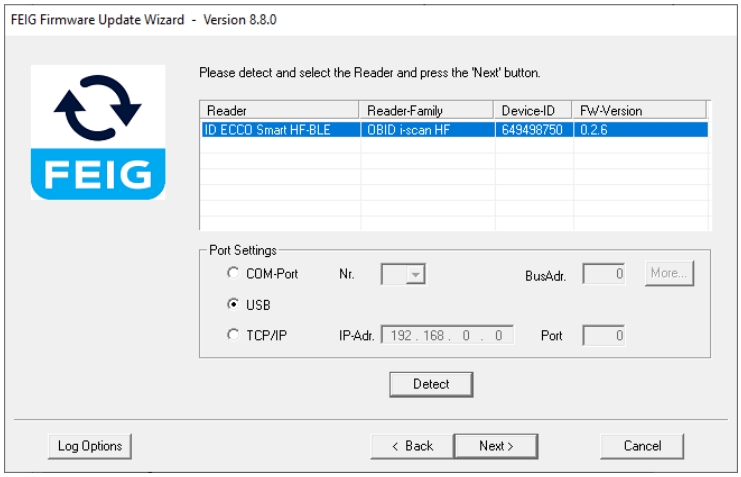


Fig. 17: Window Firmware Update Wizard of ISOStart+ or FirmwareUpdateTool

12 Radio Approvals

12.1 Europe Declaration of Conformity (CE)

Hereby FEIG ELECTRONIC GmbH declares that the radio equipment type ID ECCO Smart 2D-HF-BLE is in compliance with Directive 2014/53/EU.

The full text of the EU declaration of conformity is available at the following internet address:
https://www.feig.de/en/service/eu-declarations-of-conformity/

CE

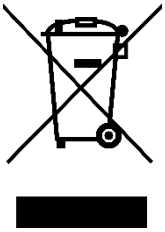
12.2 USA (FCC) and Canada (IC)

Product names:	**ID ECCO Smart HF-BLE, ID ECCO Smart 2D-HF-BLE**
Reader name:	**ID ECCO Smart**
FCC ID: **IC:**	**PJMECCOSMART** **6633A-ECCOSMART**
Notice for USA and Canada	This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation. Changes or modifications not expressly approved by the party responsible for compliance voids the user's authority to operate this equipment. This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions: (1) This device may not cause interference. (2) This device must accept any interference, including interference that may cause undesired operation of the device. L'émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes: 1) L'appareil ne doit pas produire de brouillage; 2) L'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.
Contains FCC ID: **IC:**	**YCP-STM32WB5M001** **8976A-STM32WB5M01**

13 Technical data

Mechanical Data	
Housing	Double-walled Inside: robust ABS Outside: protective rubber coating
Dimension (W x H x D)	87 mm x 48 mm x 26 mm (3.42“ x 1.89“ x 1.02“)
Weight	98 g (3.46 oz)
Protection Class	IP 54
Color	black, red
Electrical Data	
Operating Frequency RFID	13.56 MHz
RF Output power	1,5 W RF Reader IC
Supported Transponders	ISO 15693
Supported Barcode 1D	EAN-8, EAN-13, UPC-A, UPC-E Code 128, Code 39, Code 93, Industrial 2of5, Interleaved 2of5, UCC/EAN-128
Supported Barcode 2D	DataMatrix, QR Code, PDF417
Interfaces • USB • Bluetooth	 USB 2.0 Serial Bluetooth LE V4.2 / V5.0
• Battery	1300 mAh Lithium Polymer, 3.7 V
Indicators	LED (red, green, yellow, blue) Speaker Vibration feedback
Keyboard	4 keys ON/OFF, Hardware Reset Trigger Hardware Reset Reserved
CPU	Dual Core Processor
Memory	256 MB RAM 1 MB Flash
Proof of Data	Non-volatile memory
Supported OS	USB: Win 10 (32 and 64 bit) BLE: iOS from V13.3.1 & Android from V9.0
Bluetooth Low Energy Interface / BLE GATT Profile	FEIG BLE Services with FEIG protocol frame BLE Zhaga book 25 compatible
Configuration	ISOStart+ V11.01.00 or newer
Environmental Conditions	
Temperature Range • Operation • Battery load • Storage	 -20 °C up to 55 °C (-4 °F up to 131 °F) 0 °C up to 55 °C (32 °F up to 131 °F) -20 °C up to 60 °C (-4 °F up to 140 °F)
• Humidity	5 % up to 95 % (non-condensing)
Drop	1.6 m drop to concrete
Standard Compliance	
	RoHS, WEEE, CE, FCC, IC

14 Disposal



Never dispose of Lithium Polymer (LiPo) batteries in household waste! LiPo batteries can be disposed of at special collection points. Before disposal, make sure that the LiPo battery is completely discharged.

When disposing of the product, observe the relevant national legal regulations.

15 Maintenance and Cleaning

15.1 Cleaning the Housing

To clean the housing and the lens use a clean and dry cleaning cloth. Do not use chemical cleaners, lyes or similar.

16 Warranty

FEIG ELECTRONIC warrants that the product will be free of defects in material and workmanship for 12 months from the date of shipment when used as intended. FEIG ELECTRONIC will, at its option, either repair or replace the defective products. Such repair or replacement shall be buyer's sole remedy in the event of manufacturer's breach of his limited warranty. Repaired or replaced parts or products may include new, reconditioned or remanufactured parts and equipment at manufacturer's option. All costs associated with shipment to FEIG ELECTRONIC for warranty service, including but not limited to freight, duties, insurance and custom fees, are buyer's responsibility. FEIG ELECTRONIC will pay the freight costs (duties, insurance, customs and any other fees) associated with the return shipment to the buyer. The method of shipment will be at the manufacturer's discretion. Repair or replacement of any parts or equipment does not extend the period of warranty provided for herein.

THIS LIMITED WARRANTY IS THE MANUFACTURER'S ONLY WARRANTY. FEIG ELECTRONIC DOES NOT GIVE WARRANTIES OF MERCHANTABILITY OR WARRANTIES OF FITNESS FOR A PARTICULAR PURPOSE.

To take advantage of this warranty, the buyer should contact the seller not the manufacturer. The warranty set forth herein does not cover and FEIG ELECTRONIC will have no obligations hereunder if any non-conformance is cause in whole or in part by accident, transportation, neglect, misuse, alteration, modification, or enhancement of the product or incorporation, interfacing, attachment of any feature, program, or device to the product by a person or entity other than the manufacturer, failure to provide a suitable installation environment, use of the product for other than the specific purpose for which the product is designed or any use of the product not in accordance with the User Guide or other misuse or abuse of the product. The warranty does not cover problems linked to batteries.

In case the product was bought directly from FEIG ELECTRONIC the buyer should refer to www.feig.de/en/service/returns/.

Shipment Address:

FEIG ELECTRONIC GmbH
Lange Strasse 4
D-35781 Weilburg
Germany

17 Annex

17.1 Accessories

The following accessories are available for the Reader ID ECCO Smart.

Article No.	Name	Description
5903.000.00	ID BLE.USB - Dongle with FEIG Bluetooth LE V4.2 Data Service	USB BLE 4.2 dongle which is serial USB to UART module which contains the FEIG BLE Data Service
5093.921.00	ID Docking Station - ECCO	Docking Station for ID ECCO SMART / lite / optimo and ID ECCO Smart
5090.930.00	ID NET.5V-EU USB Power Supply 1000mA	Power Supply 100 - 240V AC Input Voltage, (Continental European Plug), Output: 5 V DC/⎓; 1000mA inclusive USB charging and communication cable
5090.930.10	ID NET.5V-US USB Power Supply 1000mA	Power Supply 100 - 240V AC Input Voltage, (US Plug), Output: 5 V DC/⎓; 1000mA inclusive USB charging and communication cable
5090.930.20	ID NET.5V-UK USB Power Supply 1000mA	Power Supply 100 - 240V AC Input Voltage, (UK Plug), Output: 5 V DC/⎓; 1000mA inclusive USB charging and communication cable
5090.930.30	ID NET.5V-AUS USB Power Supply 1000mA	Power Supply 100 - 240V AC Input Voltage, (Australian Plug), Output: 5 V DC/⎓; 1000mA inclusive USB charging and communication cable
5093.960.00	ID ECCO SMART customized front cover - setup costs	Setup costs for ID ECCO SMART / lite / optimo and ID ECCO Smart customized front cover
5093.964.00	ID ECCO SMART customized front cover	Customized front cover for ID ECCO SMART / lite / optimo and ID ECCO Smart