

User Manual

C-One e-ID x / MR2xxx



(Photo non-contractual)

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1. PRODUCT HARDWARE DESCRIPTION.

The C-One e-ID x / MR2xxx is a BT/WIFI/GSM-2G-3G-4G/RFID/2D/Biometric mobile device able to read all secure ID documents.

Front, Right & Top Views



(Photo non-contractual)

Left, Back & Bottom Views



(Photo non-contractual)

2. PRODUCT SOFTWARE DESCRIPTION

2.1 OS

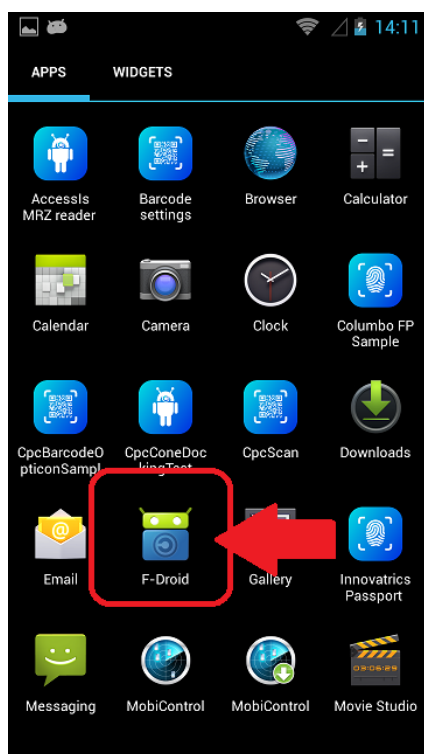
The C-One e-ID x / MR2xxx has Android 4.2 with API level 17. It does not integrate Google services for security purpose.

2.2 CpcServices

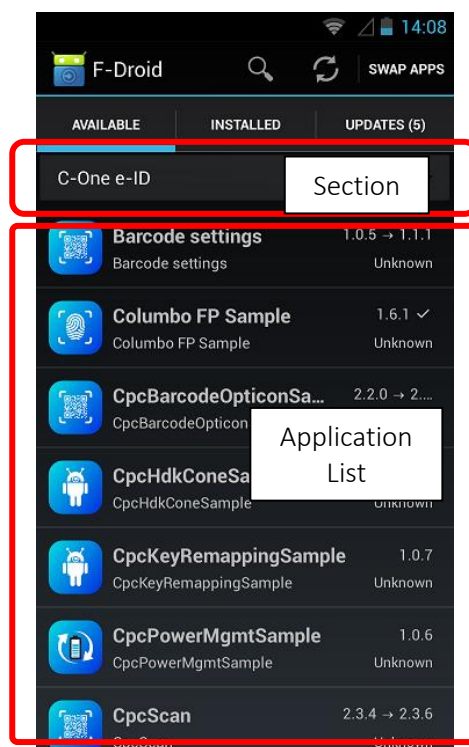
The CpcServices is a required software that has been developed by Coppernic to handle data capture peripherals communication and power management. **It must be installed and it is installed during manufacturing process.** However, it will be removed in case of a Factory reset.

2.3 F-droid

F-droid is catalog of applications developed and maintained by Coppernic. It can be downloaded at www.coppernic.fr/fdroid.apk. It will include the CpcServices as well as sample applications showing the biometrics peripherals functionalities. All the application required for the C-One e-ID are available under the C-One e-ID section.



F-droid application in Android menu



F-droid application running

3. HOW TO CHARGE THE C-ONE E-LD

The C-One e- ID x / MR2xxx is recommended to be charged with the provided power adaptor (5,35V, 2 A). It can also be charged through a PC with a micro USB cable.



Use DC adaptor to charger



Use PC to charge

4. HOW TO INSERT AND REMOVE MICRO SIM CARD(S) INTO THE C-ONE E- ID X / MR2XXX

INSERTION

- Open the Dual Micro SIM door
- Use a paperclip to open the SIM tray
- Insert the Micro SIM card(s) into the slot (1 &2)
- Close and press the Dual Micro SIM door after installation

REMOVAL

- Open the Dual Micro SIM door
- Use a paperclip to open the SIM tray
- Remove the Micro SIM card(s)
- Close and press the Dual Micro SIM door after removal



(Photo non-contractual)

5. HOW TO INSERT AND REMOVE MICRO SD CARD INTO THE C-ONE E- ID X / MR2XXX

INSERTION

- Open the Micro SD door
- Insert the Micro SD card into the slot as described below
- Close and press the Micro SD door after installation

REMOVAL

- Open the Micro SD door
- Use a tweezers to remove the Micro SD card
- Close and press the Micro SD door after removal



(Photo non-contractual)

6. DATA CAPTURE TO USE ON THE C-ONE E- ID X / MR2XXX

6.1 SCAN A BARCODE WITH THE IMAGER

6.1.1 Hardware

The C-One e- ID x / MR2xxx integrates an Opticon MDI3100 2D Imager. The Imager is located at the top right of the device.



(Photo non-contractual)

6.1.2 Software

There are 3 applications available in F-droid to evaluate the barcode:

CpcScan: This is a Scan wedge that returns the data in an intent or as a keyboard input if keyboard wedge is activated in barcode settings application.

CpcBarcodeSettings: This application can be used to manage the scanner settings.

CpcBarcodeOpticonSample: This is a sample showing the barcode feature. This should be used by developers when they want to integrate the barcode management to their own application.

6.2 TAKE A PICTURE WITH THE CAMERA

6.2.1 Hardware

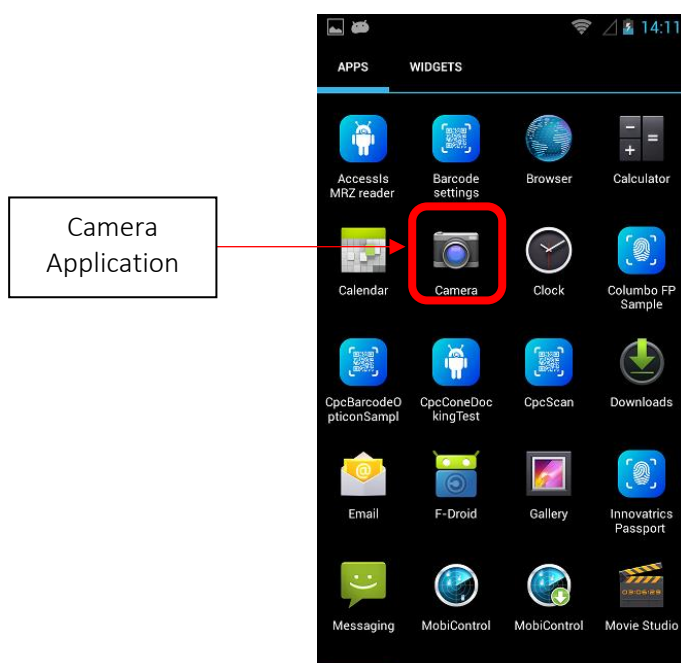
There is a back camera of 8MP.



(Photo non-contractual)

6.2.2 Software

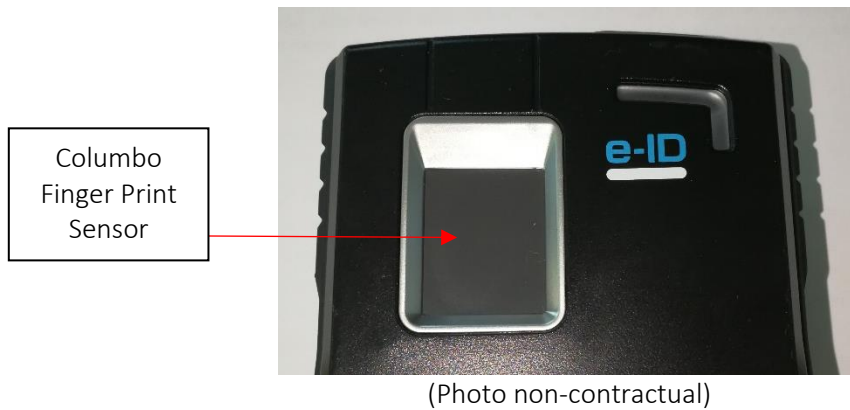
To evaluate the camera, use the standard Android application “Camera”.



6.3 DECODE A FINGERPRINT

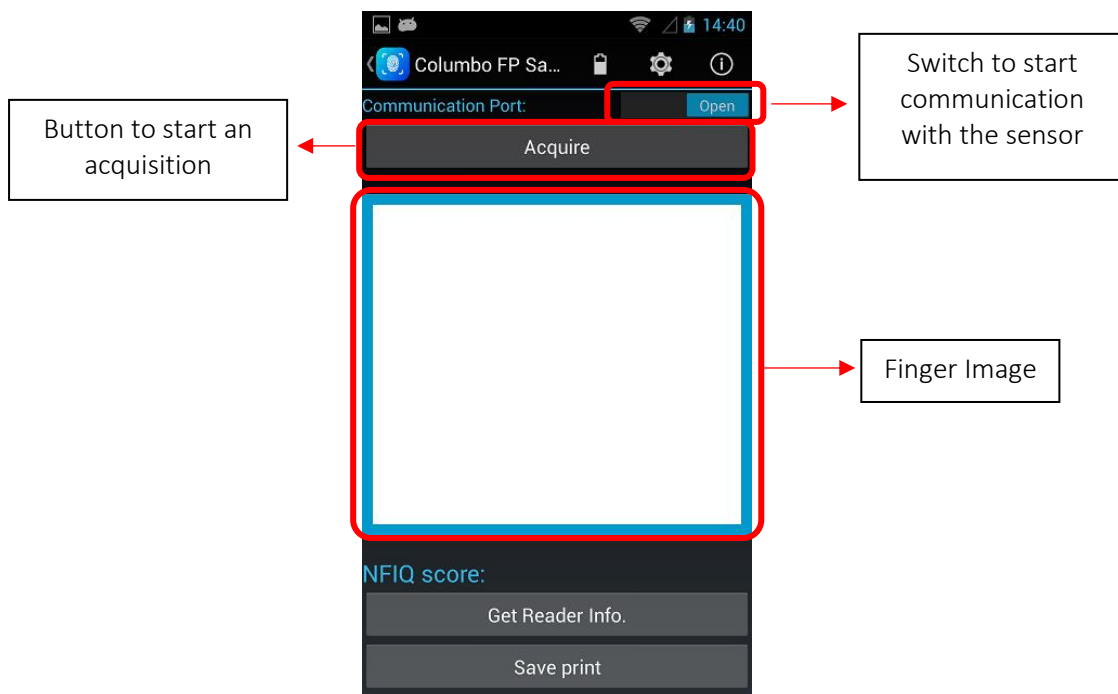
6.3.1 Hardware

The C-One e-ID x / MR2xxx integrates a Columbo sensor from Integrated biometrics. It is a Light Emitting Sensor technology. It is located at the front top left of the device.



6.3.2 Software

The CpcColumboFingerPrintSample application is available on F-droid to evaluate the Finger print sensor (Source code of the application is available in Copernic SDK).



6.4 INSERT AND READ A SMARTCARD

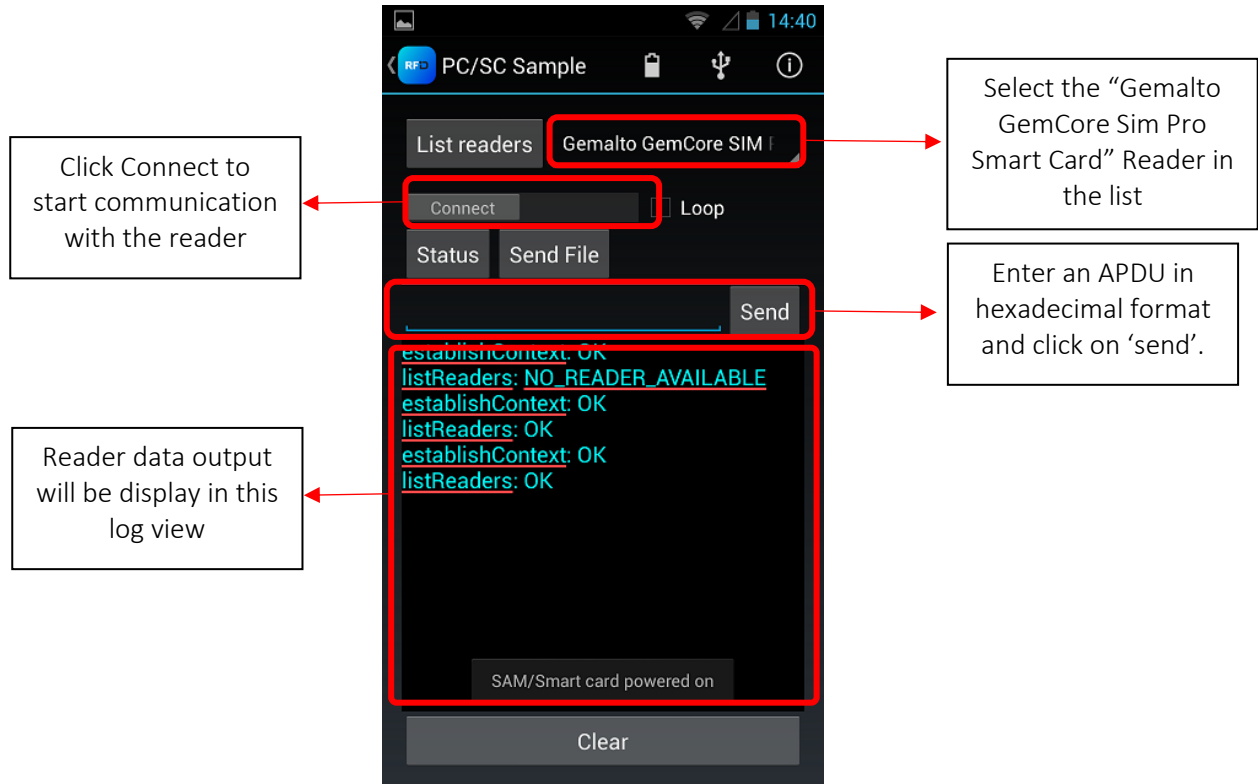
6.4.1 Hardware

The C-One e-ID x / MR2xxx integrates a Smart card contact reader at the bottom of the device.



6.4.2 Software

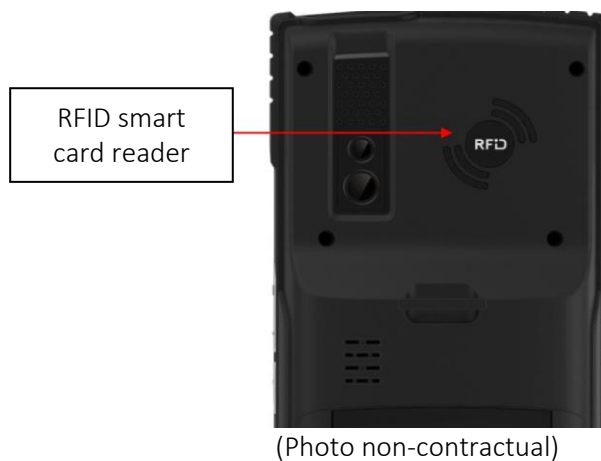
The PCSC Sample can be used to communicate with a smart card using APDU (Source code of the application is available in Copernic SDK).



6.5 READ A CONTACTLESS CARD

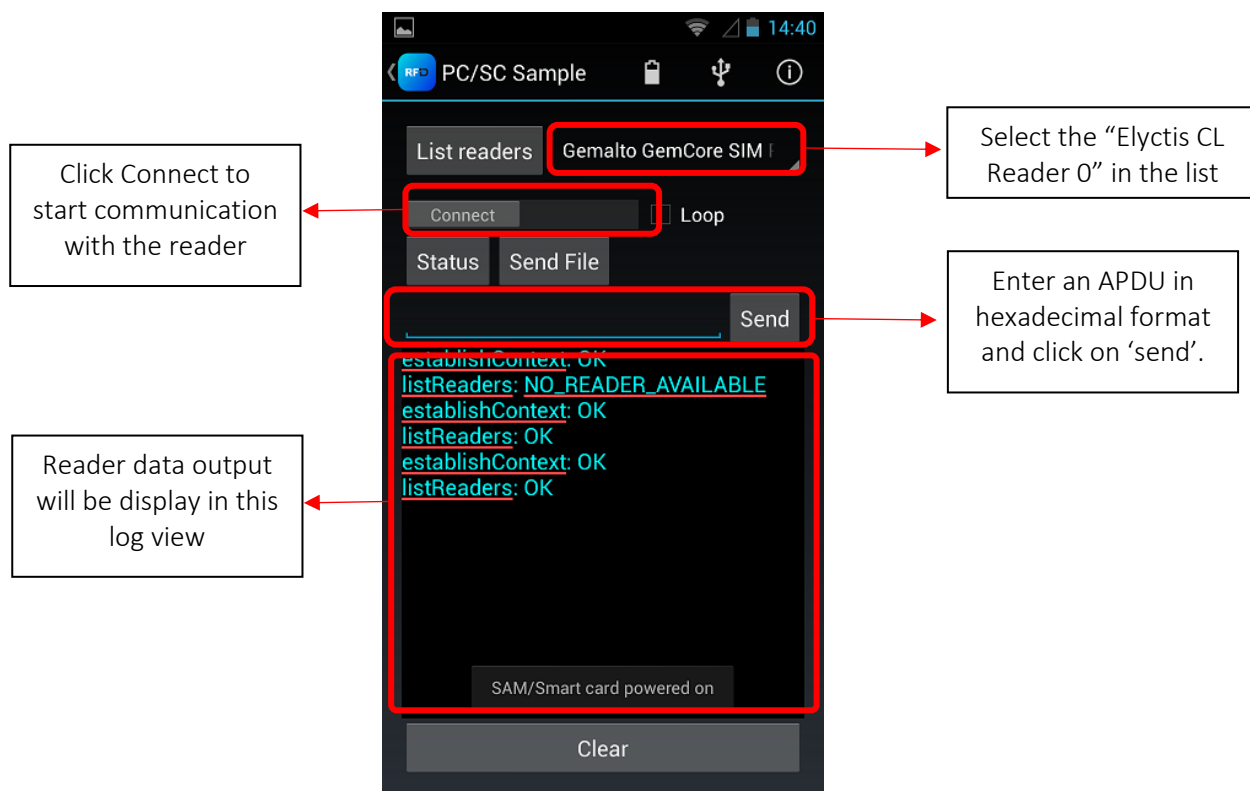
6.5.1 Hardware

The C-One e-ID x / MR2xxx integrates a Smart card contactless reader at the bottom of the device.



6.5.2 Software

The PCSC Sample can be used to communicate with a smart card using APDU (Source code of the application is available in Copernic SDK).



6.6 COMMUNICATIONS

6.6.1 Extension and communication ports

The C-One e-ID x / MR2xxx integrates a Micro SD card slot – Micro-USB and LIF connectors.
Direct Ethernet connection via a USB/Ethernet adaptor or via the Ethernet interface of the docking station

6.6.2 Wireless communications

The C-One e-ID x / MR2xxx integrates different radio communications:

- 4.0 – Class II EDR
- WiFi (2.4 GHz - 5 GHz) – 802.11 a/b/g/n
- GSM/GPRS/EDGE compliance (voice, data support): Yes
- GSM/GPRS/EDGE supported frequency bands: 850/900/1800/1900 MHz
- 3G compliance (voice, data support): Yes
- 3G supported frequency bands: UMTS B1: 2100 MHz/B5: 850 MHz/B8: 900 MHz
- 4G compliance (voice, data support): Depends on bands supported and operator
- 4G supported frequencies bands: LTE B3: 1800 MHz/B7: 2600 MHz/B8: 900 MHz/B20: 800 MHz
- Dual SIM cards (optional)
- GPS with internal antenna (less than 5 meters accuracy)

WARNING: Limited support of cellular networks in Canada and the USA

7. WARNINGS OF USE WIRELESS DEVICES

PLEASE OBSERVE ALL WARNING NOTICES WITH REGARD TO THE USAGE OF WIRELESS DEVICES.

➤ Potentially Hazardous Atmospheres – Vehicles Use

You are reminded of the need to observe restrictions on the use of radio devices in fuel depots, chemical plants etc. and areas where the air contains chemicals or particles (such as grain, dust, or metal powders) and any other area where you would normally be advised to turn off your vehicle engine.

➤ Safety in Aircraft

Turn off your wireless device whenever you are instructed to do so by airport or airline staff.

➤ Safety in Hospitals

Wireless devices transmit radio frequency energy and may affect medical electrical equipment. Wireless devices should be switched off whenever you are requested to do so in hospitals, clinics or healthcare facilities. These requests are designed to prevent possible interference with sensitive medical equipment.

➤ Safety Information – Europe

This device was tested for typical body-worn operation. Use only COPPERNIC tested and approved accessories to ensure EU compliance.

➤ Laser Devices

Class 2 laser scanners use a low power, visible light diode. As with any very bright light source, such as the sun, the user should avoid staring directly into the light beam. Momentary exposure to a class 2 laser is not known to be harmful. Caution: Use of controls, adjustments or performance of procedures other than those specified herein may result in hazardous laser light exposure.

➤ Power Adaptor

- Use ONLY a C-One Approved Power Adaptor with electrical ratings: Output 5VDC, min 2A, with a maximum ambient temperature of at least 45°C.
- Use of alternative power adaptor will invalidate any approvals given to this device and may be dangerous.

➤ Battery Information

Use ONLY a Coppernic approved batteries. When batteries are stored over six (6) months, some irreversible deterioration in overall battery quality may occur. Store batteries at half of full charge in a dry, cool place, removed from the equipment to prevent loss of capacity, rusting of metallic parts and electrolyte leakage. When storing batteries for one year or longer, the charge level should be verified at least once a year and charged to half of full charge.

➤ Battery Safety

- The area in which the units are charged should be clear of debris and combustible materials or chemicals. Particular care should be taken where the device is charged in a non-commercial environment.
- Follow battery usage, storage, and charging guidelines found in the user guide.
- Improper battery use may result in a fire, explosion, or other hazard.

8. EUROPEAN REGULATORY INFORMATION



ONLY USE COPPERNIC APPROVED ACCESSORIES.

> Wireless Device Country Approval

Regulatory markings, subject to certification, are applied to the device signifying the radio(s) are approved for use in the European countries under CE coverage. For 2.4GHz or 5GHz products: Europe includes Austria, Belgium, Bulgaria, Czech Republic, Cyprus, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Liechtenstein, Lithuania, Luxembourg, Malta, Netherland, Norway, Poland, Portugal, Romania, Slovak Republic, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.



OPERATION OF THE DEVICE WITHOUT REGULATORY APPROVAL IS ILLEGAL.

> Country Roaming

This device incorporates the International Roaming feature (IEEE802.11d) which will ensure the product operates on the correct channels for the particular country of use.

> Ad-Hoc Operation (5 GHz Band)

The device is restricted to indoor use only when operating in the 5150 to 5250 MHz frequency range. Ad-Hoc operation is limited to Channels 36-64 (5150 – 5350MHz). Use of this band is restricted to Indoor Use Only. Any other use will make the operation of this device illegal.

> Frequencies Band and Powers

Brand Name	COPPERNIC
Model Name	C-One e-ID x, MR2xxx
Tx Frequency Bands (MHz)	GSM900: 880~915 GSM1800: 1710~1785 WCDMA Band I: 1920~1980 WCDMA Band VIII: 880~915 LTE Band 3: 1710~1785 LTE Band 7: 2500~2570 LTE Band 8: 880~915 LTE Band 20: 832~862 WLAN: 2400~2483.5, 5150~5350, 5470~5725 Bluetooth: 2400~2483.5 RFID: 13.56
GPS frequency	GPS: 1575.42 MHz, GLONASS:1602 MHz

Brand Name	COPPERNIC
Model Name	C-One e-ID x, MR2xxx
Maximum AVG Conducted Power (dBm)	GSM900: 32.33 GSM1800: 29.68 WCDMA Band I: 22.37 WCDMA Band VIII: 23.64 LTE Band 3: 23.13 LTE Band 7: 21.92 LTE Band 8: 22.39 LTE Band 20: 21.76 802.11b: 16.03 802.11g: 13.13 802.11n HT20 (2.4GHz): 13.09 802.11n HT40 (2.4GHz): 13.16 802.11a: 10.46 802.11n HT20 (5GHz): 10.21 802.11n HT40 (5GHz): 10.27 Bluetooth: 5.17

Marking and European Economic Area (EEA)

> Frequency of Operation

The use of 2.4 GHz RLAN's, for use through the EEA, have the following restrictions:

- Maximum radiated transmit power of 100mW EIRP in the frequency range 2.400 - 2.4835 GHz
- France, outside usage is restricted to 2.4 - 2.454 GHz.
- Italy requires a user license for outside usage.

> Bluetooth® Wireless Technology for use through the EEA has the following restrictions

- Maximum radiated transmit power of 100mW EIRP in the frequency range 2.400 -2.4835 GHz
- France, outside usage is restricted to 10mW EIRP
- Italy requires a user license for outside usage.

The undersigned, COPPERNIC, declare that the radioelectric equipment type C-One e-ID x / MR2xxx conforms to the 2014/53/UE directive. The complete European declaration of conformity is available on the web site:

www.coppernic.fr

9. FCC INFORMATION TO USERS

Radiation Exposure Compliance

This product complies with the FCC RF exposure limits for an uncontrolled environment.

9.1 FEDERAL COMMUNICATION COMMISSION INTERFERENCE STATEMENT

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

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 UNDESIRE OPERATION.

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

To view additional information regarding the C-One e-ID x / MR2xxx, please connect to our website:

www.coppernic.fr

FCC Statement

1. 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.

(2) This device must accept any interference received, including interference that may cause undesired operation.

2. Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE:

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

Reorient or relocate the receiving antenna.

Increase the separation between the equipment and receiver.

Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

Consult the dealer or an experienced radio/TV technician for help.

SAR Information Statement

Your wireless phone is a radio transmitter and receiver. It is designed and manufactured not to exceed the emission limits for exposure to radiofrequency (RF) energy set by the Federal Communications Commission of the U.S. Government. These limits are part of comprehensive guidelines and establish permitted levels of RF energy for the general population. The guidelines are based on standards that were developed by independent scientific organizations through periodic and thorough evaluation of scientific studies. The standards include a substantial safety margin designed to assure the safety of all persons, regardless of age and health. The exposure standard for wireless mobile phones employs a unit of measurement known as the Specific Absorption Rate, or SAR. The SAR limit set by the FCC is 1.6 W/kg. * Tests for SAR are conducted with the phone transmitting at its highest certified power level in all tested frequency bands. Although the SAR is determined at the highest certified power level, the actual SAR level of the phone while operating can be well below the maximum value. This is because the phone is designed to operate at multiple power levels so as to use only the power required to reach the network. In general, the closer you are to a wireless base station antenna, the lower the power output. Before a phone model is available for sale to the public, it must be tested and certified to the FCC that it does not exceed the limit established by the government adopted requirement for safe exposure. The tests are performed in positions and locations (e.g., at the ear and worn on the body) as required by the FCC for each model. The highest SAR value for this model phone when tested for use at the ear is 0.139W/Kg and when worn on the body, as described in this user guide, is 0.174W/Kg(Body-worn measurements differ among phone models, depending upon available accessories and FCC requirements). The maximum scaled SAR in hotspot mode is 1.074W/Kg. While there may be differences between the SAR levels of various phones and at various positions, they all meet the government requirement for safe exposure. The FCC has granted an Equipment Authorization for this model phone with all reported SAR levels evaluated as in compliance with the FCC RF exposure guidelines. SAR information on this model phone is on file with the FCC and can be found under the Display Grant section of <http://www.fcc.gov/oet/fccid> after searching on

FCC ID: [XGK-C-ONE-EID-ELY](#) Additional information on Specific Absorption Rates (SAR) can be found on the Cellular Telecommunications Industry Association (CTIA) web-site at

<http://www.wow-com.com>. * In the United States and Canada, the SAR limit for mobile phones used by the public is 1.6 watts/kg (W/kg) averaged over one gram of tissue. The standard incorporates a substantial margin of safety to give additional protection for the public and to account for any variations in measurements.

Body-worn Operation

This device was tested for typical body-worn operations. To comply with RF exposure requirements, a minimum separation distance of 15mm must be maintained between the user's body and the handset, including the antenna. Third-party belt-clips, holsters, and similar accessories used by this device should not contain any metallic components. Body-worn accessories that do not meet these requirements may not comply with RF exposure requirements and should be avoided. Use only the supplied or an approved antenna.