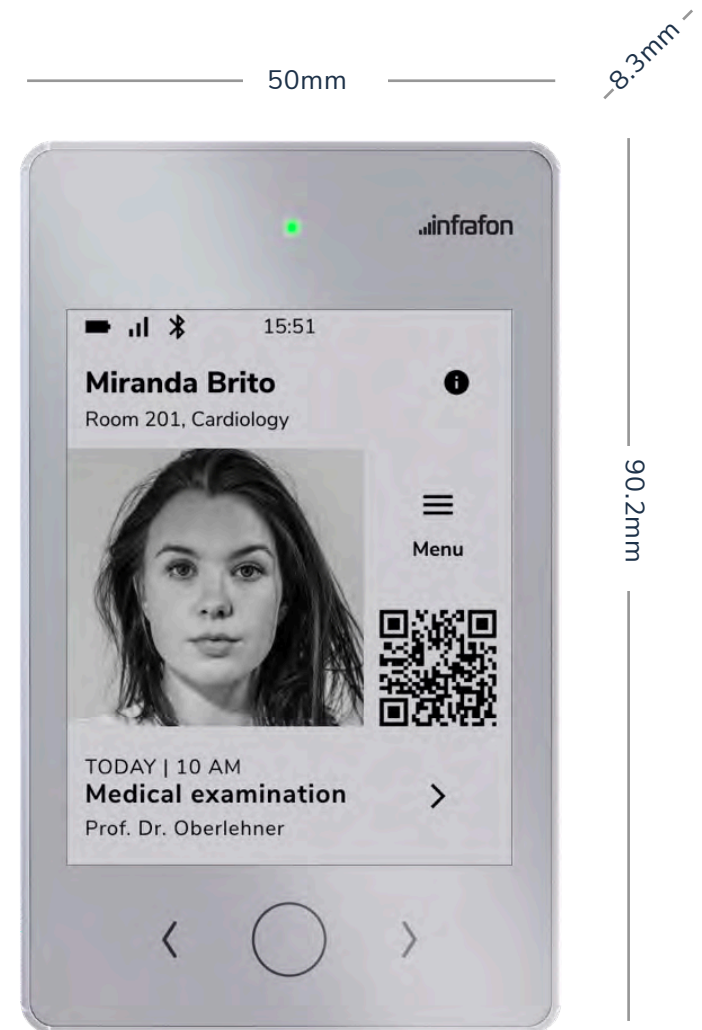


Specifications

Infrafon CC1

Parameter	Specifications
display	600x480pixel e-paper
body	50mm x 90.2mm x 8.3mm fall & splash proof PC ABS
touch	15 capacitive touch areas, PMMA, antiglare
communication	LoRaWan NB-IoT LTE-M Wifi GNSS 2x RFID (active/passive)
firmware (optional)	IES 0.9
battery	LiPo, 440mAh
weight	51g



CE FCC-ID WEEE Certifications

Infrafon brand and Infrafon technology is protected by international patents. (i.e. EU Patent filings 30 2021 105 271.4 and 10 2021 115 757.9)

CC1 Tech Sheet

Modules & Sensors

1. Pycom L01 Module

- ESP32, 4MB RAM, 8MB Flash
- LoRA, Wifi, BLE

2. Sequans Monarch GM02S

- LTE-M

3. NXP SE050C2HQ1

- EAL6+ certified

4. SONY CXD5605

- multi GNSS reciever

5. Bosch BMA456

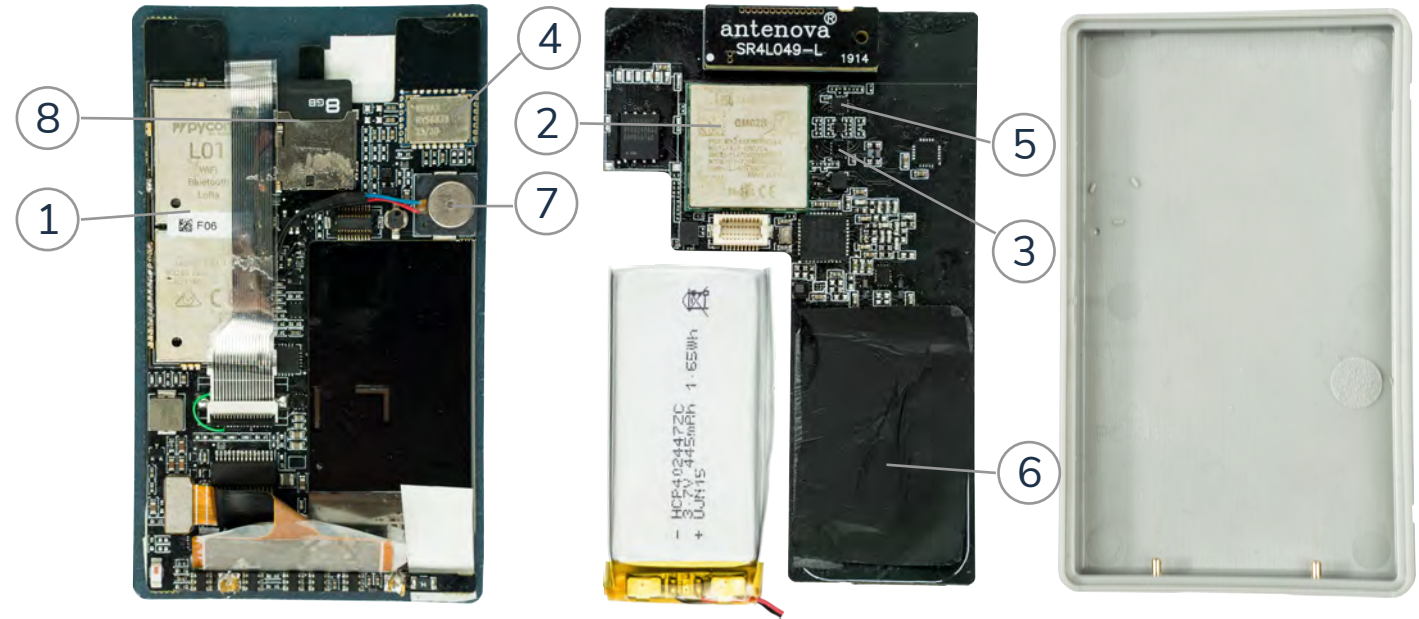
- 3-axis acceleration sensor

6.1 NXP PN7150

- active card emulation & reader

6.2 NXP NTP5210

- passive identification chip



7. Polyphonic buzzer + vibrator

8. micro SD slot

CC1-Accessories Tech Sheet

Accessories



Charging Brick
single charging (USB-C)
OrderCode: X-H-C1-1.0



Apple Airtag module
OrderCode:
X-H-A2-1.0



Lanyard-Clip
OrderCode:
X-H-H1-1.0



Audio Module
for Voice messages and
extra loud alarm sounds
OrderCode: X-H-A1-1.0



QR- Scanner
for scanning 1D/2D codes
OrderCode: X-H-S1-1.0

Certificates

1. Pycom L01 Module

- CE RED
- FCC DSS
- FCC DTS
- FCC DAA
- RCM
- ROHS certification

2. Sequans Monarch GM02S

- DEKRA certification
- FFC

3. NXP SE050C2HQ1

- ROHS

4. SONY CXD5605

-

5. Bosch BMA456

-

6.1 NXP PN7150

- Data sheet

6.2 NXP NTP5210

- Data sheet

7. Polyphonic buzzer + vibrator

8. micro SD slot



DEKRA Testing and Certification, S.A.U.

Product certification body accredited by ENAC with accreditation No. 134/C-PR301
and designated by the competent national authority of Spain

to act as Notified Body (Notified Body No: 1909) in accordance with the Directive 2014/53/EU of 16 April 2014

Directive 2014/53/EU – EU-TYPE EXAMINATION CERTIFICATE

Identification Number: **67117RNB.001A1**
Issue date: **2021-06-16**

MANUFACTURER DETAILS:

Company name: **Sequans Communications**
Address: **15-55 Boulevard Charles de Gaulle, Colombes
France**

EQUIPMENT DETAILS:

Type of equipment: **LTE Cat-M Cellular communication module**
Brand name: **Sequans Communications**
Model name: **GM02S**
HW version: **GM02Sv2**
SW version: **LR8.0.1.0**

SCOPE OF OPINION:

Essential requirements	Specifications / Standards	Submitted documents
Article 3.1(a): Electrical safety	EN 62368-1:2014 + AC:2015 + AC:2017 + A11:2017	Test reports
Article 3.1(a): EMF exposure	EN 62311:2020	Assessment report
Article 3.1(b): EMC	EN 301 489-1 V2.2.3 Draft EN 301 489-52 V1.1.2	Test reports
Article 3.2: Radio spectrum use	EN 301 908-1 V13.1.1 EN 301 908-13 V13.1.1	Test reports

OPINION:

Our opinion in accordance with Annex III of DIRECTIVE 2014/53/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 April 2014 on radio equipment and the mutual recognition of their conformity is that the equipment complies with the requirements of that directive stated in the above scope.

This opinion has 1 annex with 1 page and it is only valid in conjunction with it.

Signed on behalf of DEKRA Testing and Certification, S.A.U. in Málaga (Spain)

Name: **Ricardo Orejas**
Position: **Responsible for Certification**



Annex I to EU-Type Examination Certificate No. 67117RNB.001A1

TECHNICAL DOCUMENTATION:

Held at: **Sequans Communications**
Address: **15-55 Boulevard Charles de Gaulle, Colombes**
France

TECHNICAL FEATURES AND CHARACTERISTICS:

Operation modes: **LTE CAT-M**
Operating frequency bands: **band 1, band 3, band 8, band 20, band 28**
Modulations: **QPSK**
Output power (rated): **23 dBm**
Voltage range: **2.5 VDC to 5.5 VDC (Nominal: 3.3 VDC)**
Temperature range: **-40° - 85°C**
Antenna: **External antenna.**
Intended use: **LTE Cat-M Cellular communication module**

CONFORMITY DETAILS:

Essential requirements	Specifications / Standards	Reference documents
Article 3.1(a): Electrical safety	EN 62368-1:2014 + AC:2015 + AC:2017 + A11:2017	67117RSE.001
Article 3.1(a): EMF exposure	EN 62311:2020	67117RAN.003
Article 3.1(b): EMC	EN 301 489-1 V2.2.3 Draft EN 301 489-52 V1.1.2	67117REM.005A1
Article 3.2: Radio spectrum use	EN 301 908-1 V13.1.1 EN 301 908-13 V13.1.1	67117RMV.003 67117RMV.002 67117REM.004

REMARKS AND COMMENTS:

Device evaluated with Broadband Antenna OmniLOG® 90200 antenna and TRIO mXTENDTM (FR01-S4-210) antennas. The use of different antennas may affect the compliance; if the manufacturer is in doubt about the compliance then the equipment with the new antennas must be assessed to demonstrate compliance with the essential requirements of the Directive 2014/53/EU. It should be noted that assessment does not necessarily lead to testing.

This device has been evaluated on a test jig. This radio module is for professional installation only. When installing this radio module permanently into a host product to create a new radio equipment device; the manufacturer responsible for placing the final radio product on the market in the EU must assess if the combination of this radio module and the host product complies with the essential requirements of the RE Directive 2014/53/EU.

Host devices integrating this device will need to be evaluated according to the essential requirements of Directive 2014/53/EU following the guidelines provided in the document "REDCA Technical Guidance Note 01 on the RED compliance requirements for a Radio Equipment often referred to as Radio Module and the Final Radio Equipment Product that integrates a Radio Module". This Technical Guidance Note may be accessed in RED Compliance Association website or may be obtained by contacting with DEKRA Testing and Certification, S.A.U. Notified Body at certification.rcb.es@dekra.com.

EMF exposure only evaluated when the antenna used with the device is located at a minimum distance of 20 cm from the user.

The device also operates in other non-EU frequency bands. This operation has not been evaluated in this opinion.

It is mandatory to inform DEKRA Testing and Certification, S.A.U. in writing about any change in the approved equipment identified in this certificate, which could affect the conformity of the apparatus with the essential requirements or the conditions of validity of this certificate.

This certificate replaces and supersedes the EU-Type Examination Certificate No. 67117RNB.001.