



# LCN9810 NFC scanner Datasheet

2021-07-15

PG Services and Tools

# NFC scanner

In case you have problems reading a driver, we recommend to start using an NFC scanner.

- When your smartphone has no or weak NFC-antenna
- When the driver cannot be reached with your smartphone
- We have noticed that some drivers cannot be read by some smartphones running on Android 9 (or higher). This NFC scanner will solve this.

This device communicates via BLE with your smartphone.

The NFC scanner has a secure BLE connection with the smartphone

The NFC scanner is available in the sample web shop:

[Home page | Philips OEM Sample Shop EMEA](#)

*BLE = Bluetooth Low Energy*

*NFC = Near Field Communication*

The NFC scanner enables you to read/write Philips drivers

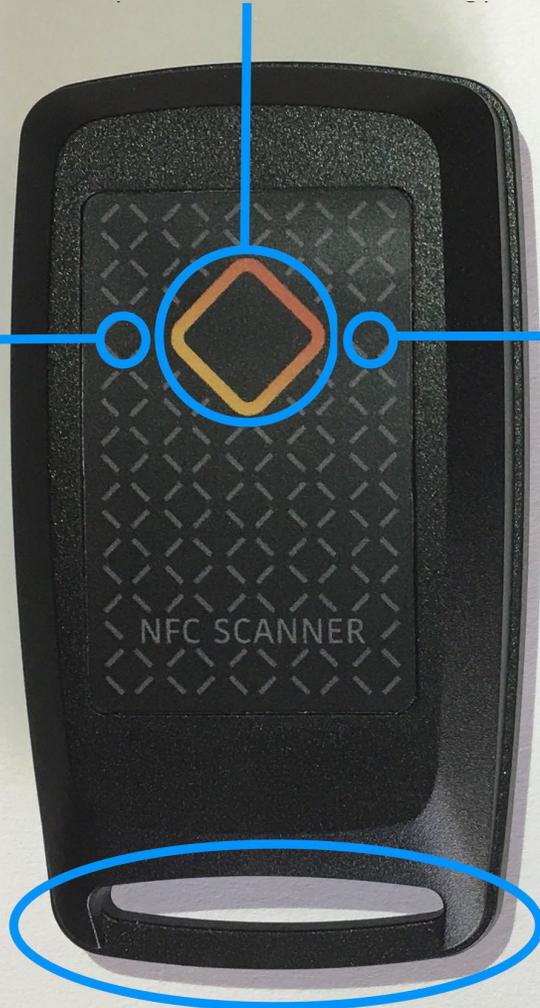


Key for power on/off, reset and scanning (for specific setting)

Blue LED to indicate battery charge status and BLE connection

Yellow LED for scanning active HW reset

Antenna



Key ring

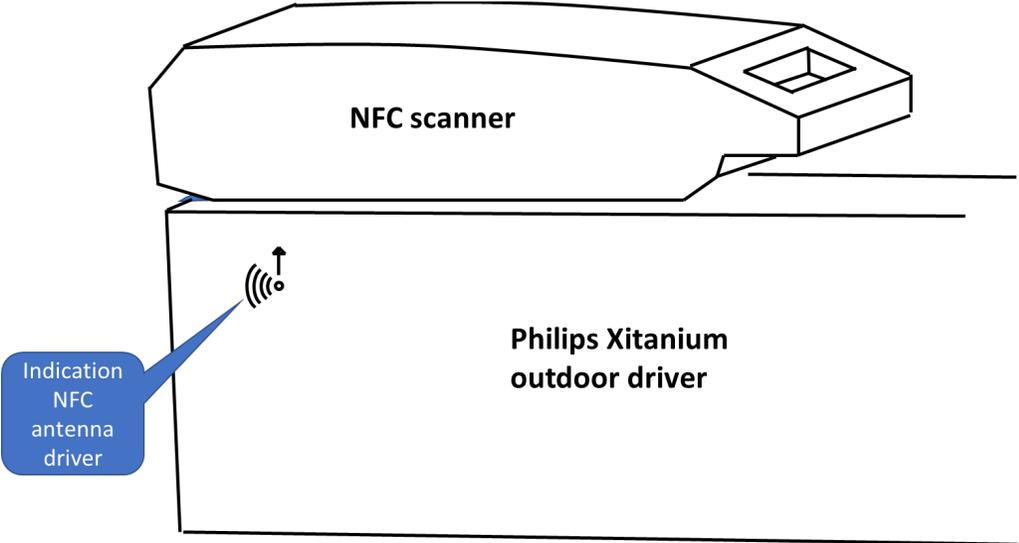
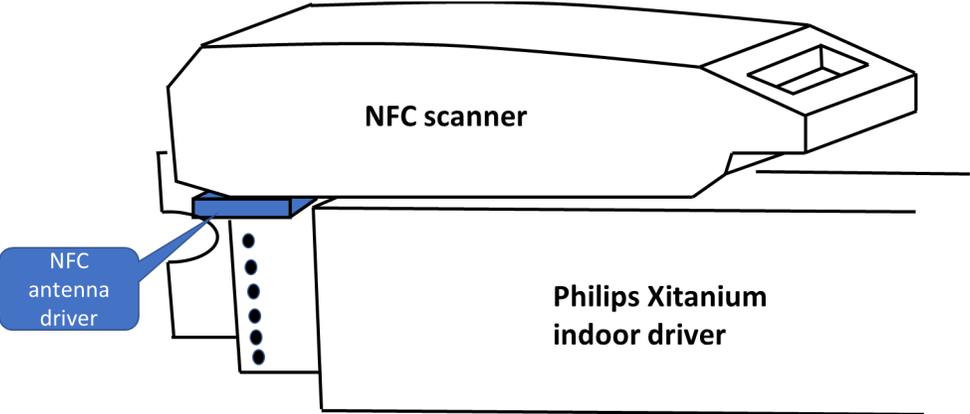


Micro USB connector

# How to use the NFC scanner?

- Make sure the battery of the NFC scanner is charged sufficiently, use the micro USB connector near the key-ring to charge. A low battery will have less good communication capabilities
- Switch on the NFC scanner by the pushbutton (see previous slide)
- The scanner will switch off automatically after approximately 5 minutes
- Position the antenna of the scanner parallel to the antenna of the driver for optimal connection (see explanation next slide)
- In case the communication is not as good as can be expected, please experiment by changing the position of the NFC scanner relative to the driver
- When reading or writing data to or from the driver you do not need to push the pushbutton

# Best position of the NFC scanner relative to the PHILIPS driver



# Button, LED's and Beeper

Action	Light Displayed	Light Sequence	Beeper Sequence	Status - Function
				Off
1 sec. hold				Start Devices
				Power On
				Scanning
				Successful reading
				Reading error

Scan Functions

2 sec. hold				Shutdown	Battery Status
				Battery Low	
USB connected				Battery Recharge	
plugging USB				Start Devices	
				Battery Low no operations allowed	
				Bluetooth disconnected	
6 sec. hold				Hardware reset	

# Specifications

<b>MAN/MACHINE INTERFACES</b>	1 function key for RFID read activation, power on/off
	Multitone Beeper
	2 LED for device operation signaling
<b>INTERNAL DEVICES</b>	Frequency: 13.56 MHz
	Channel occupancy in accordance with: <ul style="list-style-type: none"><li>• ETSI EN 302 330-2 V1.6.1, ETSI EN 300 328 V1.9.1</li></ul>
	Power: 200 mW
	Standard: ISO 15693, ISO 14443-A (only ID reading)
	Reading distance: up to 6 cm(*)
	Embedded antenna
<b>INTERFACES</b>	Micro USB type B
	Bluetooth® low energy technology
<b>OS COMPATIBILITY</b>	Android, iOS, RIM, Windows Mobile/Phone, Windows, OSX, Linux compatible with Bluetooth® low energy technology
<b>PROCESSOR</b>	Texas Instruments MSP430 (16 bit RISC a 16MHz)
<b>POWER SUPPLY</b>	<b>USB powered:</b> 230mA peak @ 5Vdc (RF active full power, beeper, battery charging), 30mA @ 5Vdc (idle mode, battery charged)
	<b>Battery powered:</b> Li-Poly Battery 3.7 Vdc 300mAh, rechargeable via micro USB, battery life 15000 reading, 24 h in idle mode
<b>WORKING TEMPERATURE</b>	-20°C / 60°C
<b>DIMENSIONS</b>	Width 4.3 cm – Height 7.7 cm – Depth 1.7 cm
<b>WEIGHT</b>	21 g
<b>PROTECTION DEGREE</b>	IP54

(\*) depending on the TAG



Tertium manual

# ANNEX MultiOne Mobile – example of Specification format

```
Summary_Xi SR 40W 0.2-0.7A SNEMP 230V C133 sXt 22-10-2020 16-04-50.txt - Notepad
File Edit Format View Help
{
  "aloValue": "78%",
  "aocValue": "200mA",
  "dateAndTime": "22 oktober 2020 16:04:24",
  "deviceName": "Xi SR 40W 0.2-0.7A SNEMP 230V C133 sXt",
  "dynadimValue": "Not Enabled",
  "firmwareVersion": "1.0",
  "globalProductCode": "929001573506",
  "gps": "51.3584784, 5.3301111",
  "historyFaultCode": "[0, 0, 0, 0, 0, 0, 0, 0, 0, 0]",
  "systemOnTime": "0 hr(s) 0 min 0 s",
  "systemStartsCount": "0",
  "uniqueProductId": "E0024D84D8C27041"
}
```

Signify