

NFC Reader Series

PRODUCT OVERVIEW

LANTRONIX Near Field Communication (NFC) readers are high performance and flexible ISO14443A/B MIFARE® contactless smart card readers with read capabilities of 13.56MHz, which are designed for short range applications. They can be used in a wide range of automotive, identification applications such as secure vehicle access control, contactless key, vehicle and driver identification.

The NFC-Windscreen reader is designed to be installed directly behind the windshield or anywhere else inside the vehicle in a way that it is accessible from outside the vehicle. The NFC-InCar reader is designed to be installed e.g. in the car's centre console (inside the cabin). It has an integrated card slot, into which the NFC card can be inserted. The card remains there e.g. for hands-free operation and enables the car to start.

13.56MHz NFC-InCar



13.56MHz NFC-Windscreen



**13.56MHz
NFC technology**

Built-in antenna for contactless tag access with reading distance of up to 40 mm

**Compliant with
NFC standards**



Built-in anti-collision feature.
Support ISO 14443 Type A and B cards,
MIFARE®, FeliCa, and ISO 18092 tags



**RS-232
communication**

Interoperability with FALCOM vehicle telematics products supporting different NFC-related events to trigger actions

**Programmable
Multicolour LEDs**



Red, green and white LEDs
can be controlled by FALCOM
vehicle telematics products

**Vehicle Access
Control**



**Vehicle and Driver
Identification**



Car-Sharing



TECHNICAL SPECIFICATION

Models

Model	Mounting
❶ NFC-Windscreen	Car windshield
❷ NFC-InCar	Car centre console

Physical Characteristics

Weight:	❶ 57g (with cable) ❷ 55g (with cable)
Cable Length:	1.5 meters
Interface Cable:	RS-232 (4pin UCOM connector) - 1 x Power input: +12...+24 VDC - 1 x Serial Port V24 (RX, TX) - 1 x Ground (GND)
Dimensions:	❶ 68 x 108 x 8 mm (WxLxH) ❷ 58 x 111 x 7 mm (WxLxH)
Status Indicators:	❶ 3 x colour LED (Green / Red / White) ❷ 3 x colour LED (Green / Red / White)
Buzzer:	❶ 1 x Buzzer; ❷ 1 x Buzzer
Casing Colour:	Black

Electrical Characteristics

Supply Voltage: +12 VDC to +24 VDC $\pm 5\%$

❶ Stand by (Max.): 8 mA; Operation (Max.): 33¹⁾/62²⁾ mA

❷ Stand by (Max.): 8 mA; Operation (Max.): 32¹⁾/52²⁾ mA

Performance

Operating Freq.: 13.56 MHz

Compliance: ISO14443 Type A & B

ISO 15693 ISO 18092 Tag

MIFARE, FeliCa

Operating Distance: Up to 40 mm

Environmentals

Operating Temp.: -45°C to 85°C

Storage Temp.: -20°C to 70°C

Relative Humidity: 5% to 95% non-condensing

NFC-Tags

The NFC tags can be ordered separately:

- Ordering name: RFID-TAGS-TYPE-A

¹⁾ Three LEDs are off; ²⁾ Three LEDs are permanently on

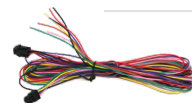
CONNECTION CABLES TO FOX3-2G/3G/4G SERIES

The connection cables can be ordered separately

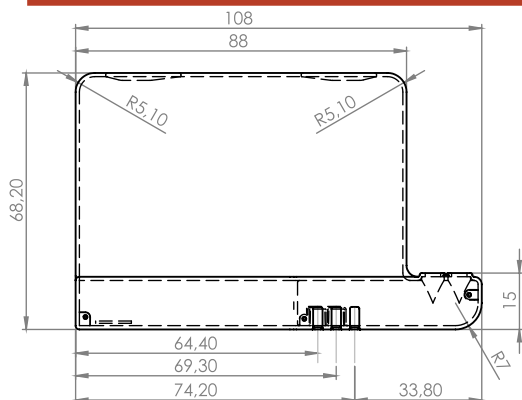
CA31- Used to connect NFC with FOX3 to the 1st serial port (Main port)



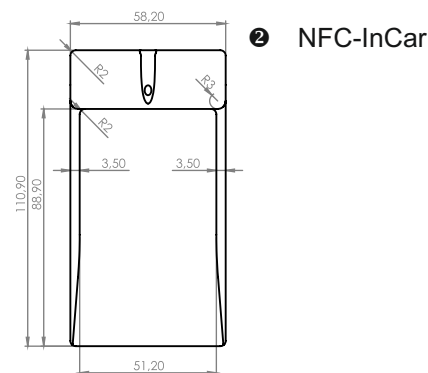
CA69 - Used to connect NFC with FOX3 to the 2nd serial port (Accessory port)



DRAWINGS



❶ NFC-Windscreen



❷ NFC-InCar

Lantronix, Inc.
7535 Irvine Center Drive - Suite 100
Irvine, CA 92618
United States of America.
www.lantronix.com

LANTRONIX
CONNECT SMART. DO MORE.™

Tel: +(800) 526-8766
Tel: +1 (949) 453-3990
Fax: +1 (949) 453-3995
sales@lantronix.com