# nexmosphere

DATASHEET XR RANGE | XR2 RFID DRIVERS



# **XR-DR2 RFID DRIVER**

## XR2 RFID driver

The Nexmosphere XR2 RFID drivers read and write NTAG213 tags to create professional and dynamic applications using NFC technology. The broad range of antenna sizes that connect to the drivers guarantees a great mechanical fit for your RFID project. Whether you want to create interactive installations for thousands of retail products or offer personalized storytelling in a museum, the XR2 RFID Drivers enable you to do so.



## XR-DR2

The XR-DR2 antenna driver detects "tag placement" and "tag removals", and processes additional tag information from NTAG213 tags such as the UID or text fields. It is the ideal solution for complex, or large-scale NFC applications.

### Features

- Read UID (Unique Identifier) of an NTAG213 RFID tag
- Read "Tag number" (nr 1-65535)
- Read "Custom text labels" (16 ASCII characters)
- Lock/unlock NTAG213 with password
- Detects "tag placed" and "tag removed" events
- Multi-tag detection (up to 4 tags)

## X-talk

The XR2 RFID driver connects to any of the Nexmosphere Xperience controllers using an X-talk cable. Settings of the XR2 RFID driver are programmable on the controller, enabling seamless integration in your application.

- Plug and smile interface
- Compatible with any Nexmosphere Xperience controller
- Powered by and configurable with Nexmosphere Xperience controllers

## Read UID (Unique Identifier)

The UID of an NTAG is a fixed code unique to each tag. UID is a broadly applied method of tag identification, typically linked to associated info in a database. Per default, the XR-DR2 reads the UID of a tag and indicates whether the tag was detected ("placed") or removed ("picked-up").

## Read "Tag number"

The "Tag number" is adjustable between 1-65535 and, unlike the UID, multiple tags can have the same Tag number. The XR-DW2 can read this number to identify a tag. By using Tag number instead of UID, tags can be replaced without changing any programming, as the replacement Tag number can be the same as the last.

## Read "Custom text labels"

Custom text labels offer the option to store textual information on a tag such as merchandise information or visitor preferences (e.g. language). As the XR-DR2 can read custom text labels, it is applied in dynamic applications such as displaying product information on a screen or checking entrance and exit times of visitors. A total of 3 fields with 16 characters each are available.

## **RFID** tags

The XR2 RFID Drivers are compatible with NTAG213 tags. The specifications of the default XNN tags that Nexmosphere offers are:

- 13.56 Mhz, NTAG213
- 28mm tag diameter / 23mm coil diameter
- White coating, sticker on back.

Any 3rd party NTAG213 is compatible. The smaller the NTAG213 used, the lower the detection range will be.

The "Tag number" and "Custom text labels", are stored using standard NDEF records and can be read and written using 3rd party NFC programmers or NFC apps on smartphones.

## Benefits

- Compatible with all sizes XR-antennas
- Auto-triggers on tag detection and tag removal
- Auto-calibration and auto-startup for highly reliable applications (24/7)
- Status LED indicating tag detection

## **XR-DR2 RFID DRIVER**

## Mounting specifications

Install the antenna driver outside the antenna field of the connected XR antenna.

#### **Thermal specifications**

Operating temperature: +10'C...+40'C/ +50'F ... +104'F Storage temperature: -20'C...+50'C/ -4'F ... +122'F

## **Electrical specifications**

- Operating voltage:
- 5V DC (via X-talk interface) • Power consumption: 100mA
- RFID frequency: 13.56Mhz

## Miscellaneous

- Mounting holes for easy fixation
- 1-year warranty (optional 3-year extended warranty available)

## Packaging

Netto Weight: 25g Items per carton 1, 10 or 50 pcs

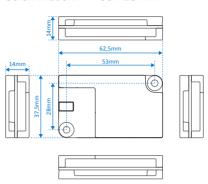
#### **Standards and Certifications**



## Mechanical dimensions

LxWxH: Screw fixation:

62,5 x 37,5 x 14 mm 53 x 28 mm



#### Hardware interfaces

- 1. XR-antenna connector
- 2. X-talk connector (compatible with CAX-M cables)







#### **Ordering information**

Product ID

XR-DR2 XR antenna driver, NTAG, Read only

Description

### Quantity

1 pc

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