

# PRODUCT DATASHEET

## Confidex Ironside Micro™ NFC



Ruggedized NFC Tag for harsh use cases including impacts, chemicals and moisture

### ELECTRICAL SPECIFICATION

#### Device type

NFC Forum Type 2

#### Air interface protocol

ISO 14443A

#### Operational frequency

13,56 MHz

#### IC type

NXP NTAG213

#### Memory configuration

User memory 144 Bytes

#### Read range\*

Mobile phone up to 30mm

Fixed reader up to 70mm

#### Applicable surface materials\*

Works on any material, also on metal

\* Read ranges are measured in laboratory environment and there can be some variation in real application. Also used surface material might affect the read range.

### MECHANICAL SPECIFICATION

#### Tag materials

High quality engineering plastics

#### Weight

4,3 g

#### Delivery format

Single, 500pcs in box

#### Dimensions

27 x 27 x 5,5 mm / 1.06 x 1.06 x 0.22 in



### ENVIRONMENTAL RESISTANCE

#### Operating temperature

-35°C to +85°C / -31°F to +185°F

#### Ambient temperature

-35°C to +85°C / -31°F to +185°F

#### IP classification

IP68

#### Chemical resistance

No physical or performance changes in

- 168h Motor oil exposure
- 168h Salt water (salinity 10%) exposure
- 5h Sulfuric acid (10%, pH 2) exposure
- 1h NaOH (10%, pH 13) exposure

Contact with acetone should be avoided

#### Expected lifetime

Years in normal operating conditions

*Values in the table are the best recommendations; resistance against environmental conditions depends on the combination of all influencing factors, exposure duration and chemical concentrations. Thus, product's final suitability for certain environmental conditions is recommended to be tested. Contact Confidex for more specific information.*

### PERSONALIZATION OPTIONS

#### Pre-encoding

- Customer specific encoding.

#### Customized data label

- Customer specific layout including logo, text, numbers, barcodes etc.

#### Customized laser engraving

- Customer specific layout including logo, text, numbers, barcodes etc.

## INSTALLATION INSTRUCTIONS

**Confidex Ironside Micro™ can be attached with several fixing methods:**

1. 3M 300LSE high performance acrylic adhesive (not included by default)

When background adhesive is ordered the tag is delivered with adhesive attached. When mounting the tag with its adhesive background, clean and dry the surface for obtaining the maximum bond strength. Ideal application temperature is from +21°C to +38°C (+70°F to +100°F), bond strength can be improved with firm application pressure and moderate heating from +38°C to +54°C (+100°F to +130°F). Installation at temperatures below 10°C (50°F) is not recommended.

2. Other adhesive fixings
  - Polyurethane adhesives
  - Epoxies
  - Silicone sealants

Silicone sealants like Dow Corning AS 7096 provide very high bond strength and resistance against mechanical stress. When tag is attached with sealant adhesive, insert a layer of sealant under the tag and press the tag on the surface. Increase the bond by adding extra sealant from the tag holes. Please refer to silicone sealant supplier for exact fixing instructions.

3. Mechanical fixing
  - Screws (size M3)
  - Pop rivets
  - Plastic rivets (size 3mm)

Mechanical fixing is recommended to be used in every application that includes risk for high mechanical stress or low temperature during tag fixing. During fixing make sure there is no air gap left in between the metal surface and tag.

## ORDER INFORMATION

**Product number:** 3001300

**Product name:** Confidex Ironside Micro™ NFC NTAG213

For other versions, additional information and technical support contact Confidex Ltd.

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