

# PRODUCT DATASHEET

## Confidex Crosswave Neo™



Dual-dipole label with good reading performance and radiation pattern for logistics applications.

### ELECTRICAL SPECIFICATION

#### Device type

UHF RFID / EPCglobal Gen2v2

#### Operational frequency

Global 865-928MHz

#### IC type

NXP UCODE 8™

#### Memory configuration

EPC 128 bit, TID 96 bit

#### Read range (2W ERP)\*

FCC: up to 12 m / 39 ft on plastic FCC:  
up to 10 m / 33 ft on cardboard

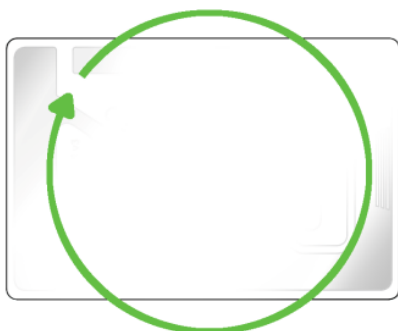
#### Applicable surface materials\*

Non-metallic surfaces

\* Read ranges are theoretical values that are calculated for non-reflective environment, in where antennas with optimum directivity are used with maximum allowed operating power according to ETSI EN 302 208 (2W ERP). ETSI = 865 - 868 MHz, FCC = 902 - 928 MHz. Different surface materials may have an effect on performance.

### TAG POLARIZATION

Confidex Crosswave Neo™ is designed to have a constant reading performance in all orientations even when using linear reader antenna.



Polarization

### MECHANICAL SPECIFICATION

#### Face material

Printable matte coated paper

#### Background adhesive

General purpose permanent adhesive

#### Delivery format

Standard: 1000 pcs on reel

4x2": 1000 pcs on reel 4x6":

500 pcs on reel

#### Pitch on reel

Standard: 79,375 mm / 3.125"

4x2": 55,245 mm / 2.175" 4x6":

155,6 mm / 6.126"

#### Reel core inner diameter

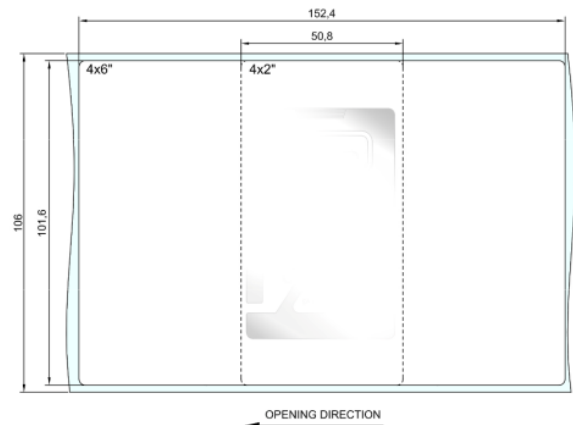
76 mm / 3"

#### Tag dimensions

Standard label dimensions:

101,6 x 50,8 mm / 4 x 2"

101,6 x 152,4 mm / 4 x 6"



### ENVIRONMENTAL RESISTANCE

#### Operating temperature

-35°C to +70°C / -31°F to +158°F

#### Ambient temperature

-35°C to +70°C / -31°F to +158°F

#### Storage condition

1 year in +20°C / 50% RH (shelf life for adhesive)

#### Expected lifetime

Meant for short term use, in normal operating conditions lifetime can be years.

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

## Pre-encoding

- Customer-specific encoding of EPC or user memory. Locking permanently or with password.

## Customized printing

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

## INSTALLATION INSTRUCTIONS

Ideal installation conditions are +20°C (+68°F) / 50% RH. For exceptional conditions, please contact Confidex. Adhesive of the Confidex Crosswave Neo™ labels will provide best adhesion in 24 hours after the installation. Bond strength can be improved with firm application pressure. Always clean and dry the surface for obtaining the maximum bond strength. Avoid touching the background adhesive.

Minimum bending diameter of the label is defined to be 50mm. Do not bend the label above the limit. Never touch on the location of the IC. IC is a sensitive electrical component and can be damaged if unexpected pressure is applied on it.

## ORDER INFORMATION

**Product number:** 4000028

**Product name:** Confidex Crosswave Neo™ 4x2" UCODE 8

**Product number:** 4000027

**Product name:** Confidex Crosswave Neo™ 4x6" UCODE 8

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

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