

# PRODUCT DATASHEET

## Confidex Crosswave Classic™



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

### ELECTRICAL SPECIFICATION

#### Device type

Class 1 Generation 2 passive UHF RFID transponder

#### Air interface protocol

EPCGlobal Class1 Gen2 ISO 18000-6C

#### Operational frequency

Global 860-960MHz

#### IC type

Impinj Monza 4E

#### Memory configuration

With Monza 4E: EPC 496 bit; TID 64 bit; User 128 bit

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

EU on plastic up to 10 m / 33 ft

EU on cardboard up to 10 m / 33 ft

US on plastic up to 10 m / 33 ft

US on cardboard up to 9 m / 30 ft

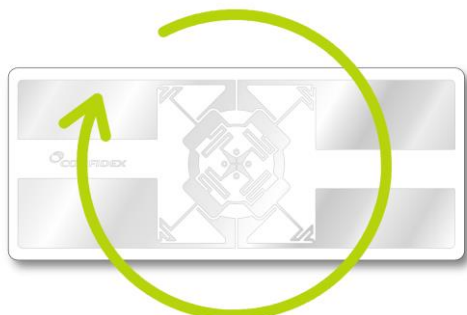
#### Applicable surface materials\*

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). EU = 865 - 868 MHz, US = 902 - 928 MHz. Different surface materials may have an effect on performance.

### 360° Readability

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



### MECHANICAL SPECIFICATION

#### Tag materials

Matt coated paper face material

#### Background adhesive

General purpose permanent adhesive

#### Delivery format

Crosswave Classic: 2000 pcs on reel

Crosswave Classic 4x2": 1000 pcs on reel

Crosswave Classic 4x3": 1000 pcs on reel

Crosswave Classic 4x6": 500 pcs on reel

#### Pitch on reel

Crosswave Classic: 42,86mm / 1.687"

Crosswave Classic 4x2": 52,92mm / 2.083"

Crosswave Classic 4x3": 78,58mm / 3.094"

Crosswave Classic 4x6": 155,6mm / 6.126"

#### Reel core inner diameter

76 mm / 3"

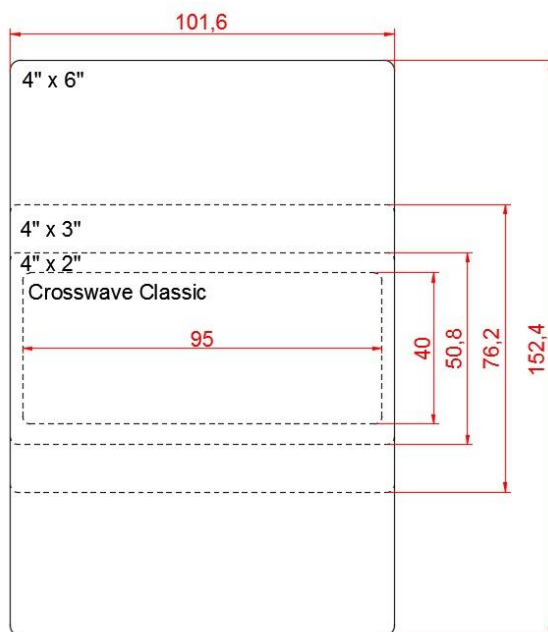
#### Tag dimensions

95mm x 40mm x 0,2mm / 3.74" x 1.57" x 0.008"

4x2": 101,6mm x 50,8mm x 0,2mm / 4" x 2" x 0.008"

4x3": 101,6mm x 76,2mm x 0,2mm / 4" x 3" x 0.008"

4x6": 101,6mm x 155,4mm x 0,2mm / 4" x 6" x 0.008"



### ENVIRONMENTAL RESISTANCE

#### Operating temperature

-35°C to +70°C / -31°F to +185°F

#### Ambient temperature

-35°C to +70°C / -31°F to +185°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 Classic™ 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.

Confidex Crosswave Classic™ label antenna parts should not be in contact with metal to enable best performance of the label.

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 chip is sensitive electrical component and can be damaged if unexpected pressure is applied on the chip.

## ORDER INFORMATION

**Product number:** 3001706

**Product name:** Confidex Crosswave Classic™ M4E

**Product number:** 3001721

**Product name:** Confidex Crosswave Classic™ 4x2" M4E

**Product number:** 3001720

**Product name:** Confidex Crosswave Classic™ 4x3" M4E

**Product number:** 3001760

**Product name:** Confidex Crosswave Classic™ 4x6" M4E

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

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