

# PRODUCT DATASHEET

## Confidex Casey™



Disposable generic label to be used with difficult high loss RFID materials in logistic chain.

### 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

NXP UCODE G2iL™

#### Memory configuration

EPC 128 bit; TID 64 bit

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

EU on plastic up to 8,5 m / 28 ft

EU on cardboard up to 6,5 m / 21 ft

US on plastic up to 9 m / 30 ft

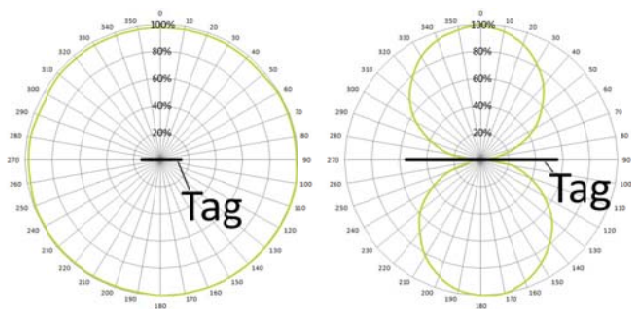
US on cardboard up to 6 m / 20 ft

#### Applicable surface materials\*

Non-metallic surfaces. Works well also on boxes where content varies from fruits, vegetables or other groceries to liquid bottles and utilities.

\* 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.

### RADIATION PATTERNS



### MECHANICAL SPECIFICATION

#### Tag materials

Printable white synthetic face layer, resin ribbon recommended.

#### Background adhesive

Permanent adhesive for general purpose use

#### Weight

0,6 g

#### Delivery format

2000 pcs on reel

#### Pitch on reel

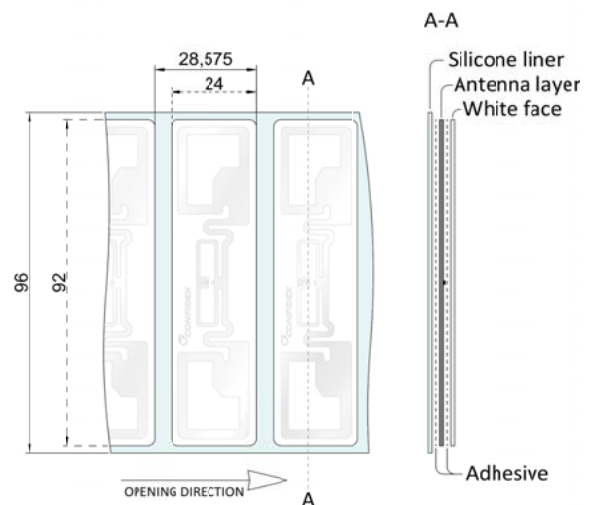
28,575 mm / 1,125"

#### Reel core inner diameter

76 mm / 3"

#### Tag dimensions

92 x 24 x 0,2 mm / 3.62 x 0.94 x 0.01 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

#### Water resistance

Good, tested 5 hours in 1m deep water (IP68)

#### Washing resistance

Industrial pressure washing not recommended

#### Chemical resistance

- No physical or performance changes in:
- 168h Sulfuric acid (10%, pH 2) exposure
- 168h Motor oil exposure
- 24h Salt water (salinity 10%) exposure
- 2h NaOH (10%, pH 13) exposure
- 30min Acetone exposure

#### Storage condition

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

#### 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 of EPC or user memory. Locking permanently or with password.

### Customized printing

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

## INSTALLATION INSTRUCTIONS



Most recommended location for the Confidex Casey™ label is in a position, where the structure of the identified item provides protection against mechanical stresses.

Ideal installation conditions are +20°C (+68°F) / 50% RH. For exceptional conditions, please contact Confidex. Bond strength can be improved with firm application pressure. Always ensure clean surface for obtaining the maximum bond strength.

During attachment to the identified item, please avoid touching the background adhesive. If the location on the asset needs to be changed, please use a new tag instead of re-placing the used one; the adhesion will suffer from the re-placement.

Minimum bending diameter of the Confidex Casey™ 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:** 3000603

**Product name:** Confidex Casey™ NXP G2iL

For additional information and technical support contact Confidex Ltd.

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