

# PRODUCT DATASHEET

## Confidex Paper Reel Label™



Label tuned for high dielectrics and designed specifically for paper reel core tagging.

### 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 R6

#### Memory configuration

EPC 96 bit; TID 96 bit

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

Freeair: Up to 14m / 46 ft

On plastic: up to 16 m / 52 ft

Paper reel: up to 8m / 26 ft\*\*

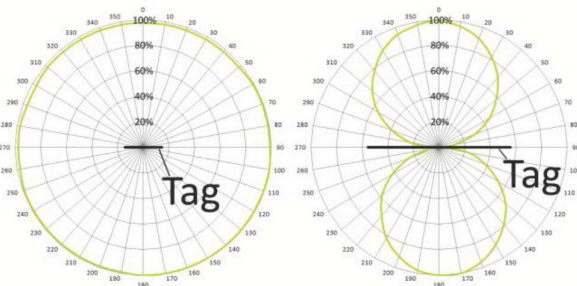
#### Applicable surface materials\*

Plastic, wood, glass, works also in paper reel core.

\* 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). Different surface materials may influence performance.

\*\* Read range on paper reel is highly depending on type and amount of paper used.

### RADIATION PATTERNS



### MECHANICAL SPECIFICATION

#### Tag materials

White PET as face of the label. Adhesive on the backside of the label.

#### Background adhesive

High quality acrylic adhesive

#### Weight

2,0 g

#### Delivery format

500 pcs on reel

#### Pitch on reel

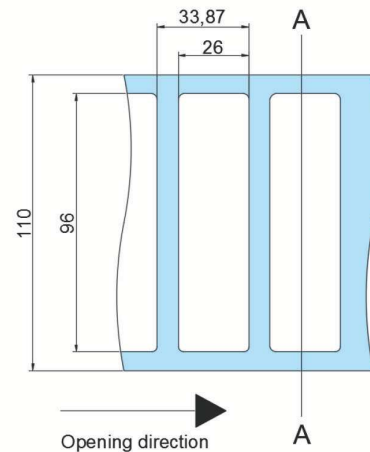
33,87 mm / 1,333"

#### Reel core inner diameter

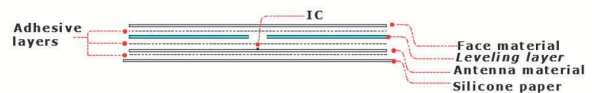
76 mm / 3"

#### Tag dimensions

96" x 26" x 0.34" mm / 3.78" x 1.02" x 0.013"



#### A - A



### 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

#### Peak temperature

120°C / 248°F for 10min

#### 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

### 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



Tag polarization

Ideal installation conditions are +20°C (+68°F) / 50% RH. For exceptional conditions, please contact Confidex. Adhesive of the label 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.

Label antenna parts should not be in contact with metal to enable best performance of the label. Note that metallized UV-protection films have strong effect on RFID performance.

Minimum bending diameter of 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:** 3001900

**Product name:** Confidex Paper Reel Label™ MR6

For additional information and technical support contact Confidex Ltd.

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