

PRODUCT DATASHEET

Confidex LoopTag™



Printable and versatile UHF RFID label designed for hard-to-tag assets such as tubes and wires.

ELECTRICAL SPECIFICATION

Device type

UHF RFID / EPCglobal Gen2v2

Air interface protocol

EPCglobal Class1 Gen2 ISO 18000-6C

Operational frequency

Global 865 – 928 MHz

IC type

Impinj Monza 4E™

Memory configuration

EPC 496 bits, user 128 bits, TID 96 bits

EPC memory content

Same EPC by default

Read range (2W ERP)*

On metal pipe up to 7 m / 23 ft

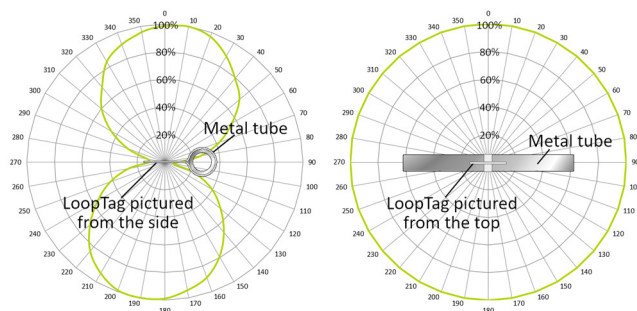
On plastic pipe up to 5 m / 16 ft

Applicable surface materials*

All materials

* 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.

RADIATION PATTERNS



MECHANICAL SPECIFICATION

Tag materials

Printable white PET, resin ribbon recommended.

Background adhesive

Permanent adhesive for general purpose use

Weight

< 1 g

Delivery format

500 pcs / reel

Pitch on reel

With 150mm: 152,4 mm / 6 in

With 250mm: 254 mm / 10 in

Reel core inner diameter

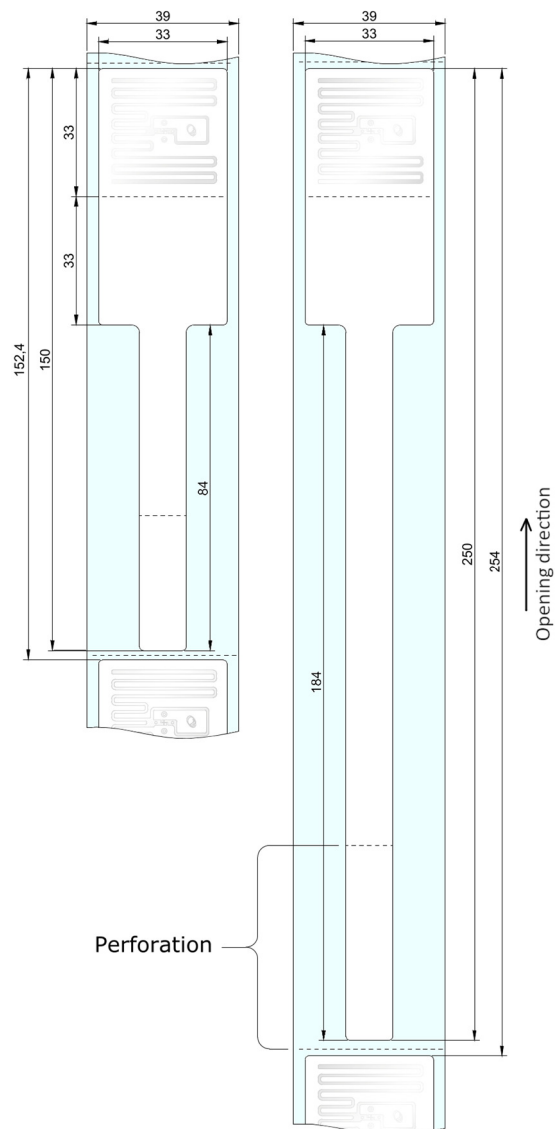
76 mm / 3"

Tag dimensions

There are two items available with different strap length for various asset diameters.

150mm: 150 x 33 x 0.2 mm / 5.91 x 1.30 x 0.01"

250mm: 250 x 33 x 0.2 mm / 9.84 x 1.30 x 0.01"



ENVIRONMENTAL RESISTANCE

Operating temperature

-40°C to +85°C / -40°F to +185°F

Water resistance

IP68, tested for 5 hours in 1m deep water

Chemical resistance

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

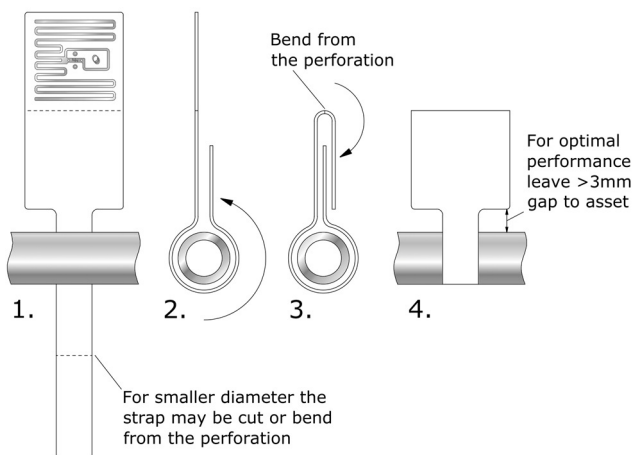
- Customer specific encoding of EPC or user memory. Locking permanently or with password.

Customized printing

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

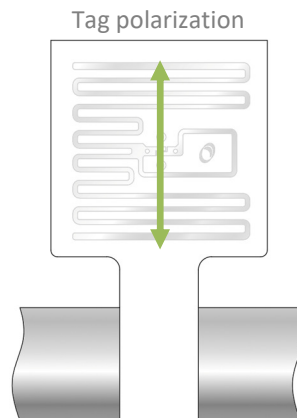
INSTALLATION INSTRUCTIONS

When attaching Confidex LoopTag™ please follow below instructions. During the attachment avoid touching the background adhesive. If the location on the asset needs to be changed, please use a new tag instead of opening the used one.

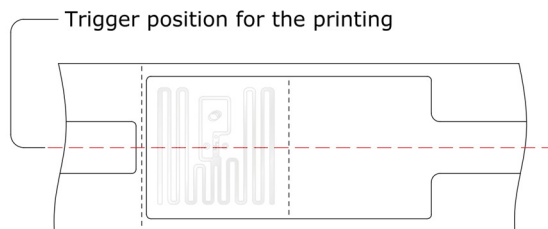


Ideal installation conditions are +20°C (+68°F) / 50% RH. For exceptional conditions, please contact Confidex. Bond strength can be improved with firm application pressure.

Minimum bending diameter of the Confidex LoopTag™ is defined to be 50mm, excluding the strap part. Never touch on the location of the IC. Tag polarization should be taken into account in case liner polarized reader antennas are used.



When printing the label align the printer gap trigger as shown below for smooth operation.



ORDER INFORMATION

Product number: 3003452
Product name: Confidex LoopTag™ M4E 150mm

Product number: 3003519
Product name: Confidex LoopTag™ M4E 250mm

For additional information and technical support, please contact Confidex Ltd.

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