

# PRODUCT DATASHEET

## Confidex Silverline Micro™



Small all-surface-RFID label for item level applications with industry leading printing capabilities

### ELECTRICAL SPECIFICATION

#### Device type

Class 1 Generation 2 passive UHF RFID transponder

#### Air interface protocol

EPCGlobal Class1 Gen2 ISO 18000-6C

#### Operational frequency

EU 865 – 869 MHz

US 902 – 928 MHz

#### IC type

Impinj Monza 4QT™

Impinj Monza 4E™ (upon special request)

#### Memory configuration

With Monza 4QT: EPC 128 bit; User 512 bit; TID 96 bit

With Monza 4E: EPC 496 bit; User 128 bit; TID 96 bit

#### EPC memory content

Same EPC in every label as a default

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

ETSI

On metal up to 1,2 m / 4 ft

On Plastic up to 1 m / 3 ft

Liquid containers up to 1 m / 3 ft

FCC

On metal up to 1,2 m / 4 ft

On Plastic up to 1,2 m / 4 ft

Liquid containers up to 1,2 m / 4 ft

#### Applicable surface materials\*

All surfaces

#### Attachment on curved surface\*

Label can be attached on a curved surface in any orientation. For optimal performance please curve the label along its longest dimension.

\* 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 have an effect on performance.

### MECHANICAL SPECIFICATION

#### Tag materials

Printable white PET, resin ribbon recommended.

#### Background adhesive

High performance acrylic adhesive optimized for metal and painted metal surfaces

#### Weight

1 g

#### Delivery format

1000 pcs on reel

#### Pitch on reel

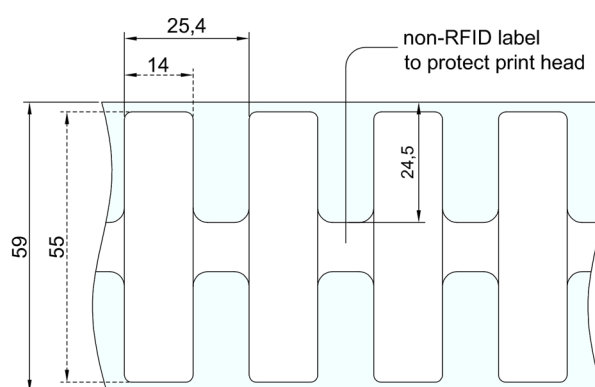
25,4 mm / 1"

#### Reel core inner diameter

76 mm / 3"

#### Tag dimensions

55 x 14 x 0,8 mm / 2.17 x 0.55 x 0.03 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

IP68, tested for 65 hours in 1m deep water

#### Washing resistance

Tolerates industrial washing with standard solvents. Washing process should be tested in final application.

#### Chemical resistance

No physical or performance changes in:

- 168h Sulfuric acid (10%, pH 2) exposure

- 168h Motor oil exposure

- 168h Salt water (salinity 10%) exposure

- 1h NaOH (10%, pH 13) exposure

Acetone should be avoided

#### Storage condition

1 year in +20°C / 50% RH

*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.

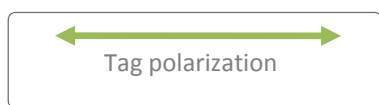
## PRINTER COMPATIBILITY

RFID encoding and printing is verified with following printer models. For more details about printer settings please contact Confidex. More validated printers will be added soon.

## Zebra

- ZT410
- ZT420
- RZ400
- RZ600
- R110Xi4

## INSTALLATION INSTRUCTIONS



When attaching the label ensure the following

- Select a smooth surface without uneven areas below tag
- Avoid touching the background adhesive and IC location

When mounting the label with its adhesive background, clean and dry the surface for obtaining the maximum bond strength. Typical cleaning solvents are heptane or isopropyl alcohol. Do not use household cleaning solvents that contain oils. Carefully read and follow the manufacturer's precautions and directions for use when working with solvents.

Ideal application temperature is from +16°C to +38°C (+60°F to +100°F), bond strength can be improved with firm application pressure and moderate heating from +38°C to +54°C (+100°F to +130°F). Application at temperatures below 10°C (50°F) is not recommended. If application is done at temperatures below 10°C (50°F) surface must be extremely clean, dry and it has to be warmed before attaching the tag to achieve best possible adhesion. Keep the tags in warm before attaching.

Minimum bending diameter of the Confidex Silverline Micro™ is 50mm. Do not bend the label above the limit.

## ORDER INFORMATION

**Product number:** 3000908

**Product name:** Confidex Silverline Micro™ M4QT ETSI

**Product number:** 3000909

**Product name:** Confidex Silverline Micro™ M4QT FCC

Following products are available upon special request:

**Product number:** 3000910

**Product name:** Confidex Silverline Micro™ M4E ETSI

**Product number:** 3000911

**Product name:** Confidex Silverline Micro™ M4E FCC

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

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