

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

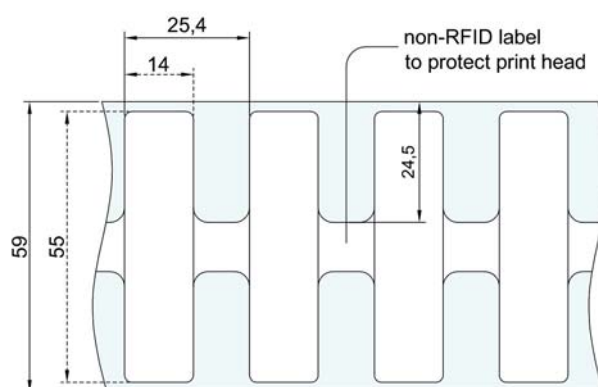
25,4 mm / 1"

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.

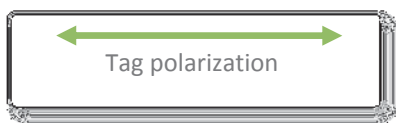
PRINTER COMPATIBILITY

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.

DISCLAIMER

THE MATERIALS, PRODUCTS AND SERVICES ARE SOLD SUBJECT TO ITS STANDARD CONDITIONS OF SALE, WHICH ARE INCLUDED IN THE APPLICABLE DISTRIBUTOR OR OTHER SALES AGREEMENT. ALTHOUGH ANY INFORMATION, RECOMMENDATIONS, OR ADVICE CONTAINED HEREIN IS GIVEN IN GOOD FAITH, CONFIDEX MAKES NO WARRANTY OR GUARANTEE, EXPRESS OR IMPLIED, (i) THAT THE RESULTS DESCRIBED HEREIN WILL BE OBTAINED UNDER END-USE CONDITIONS, OR (ii) AS TO THE EFFECTIVENESS OR SAFETY OF ANY DESIGN INCORPORATING ITS PRODUCTS, MATERIALS, SERVICES, RECOMMENDATIONS OR ADVICE. EXCEPT AS PROVIDED IN CONFIDEX STANDARD CONDITIONS OF SALE, CONFIDEX AND ITS REPRESENTATIVES SHALL IN NO EVENT BE RESPONSIBLE FOR ANY LOSS RESULTING FROM ANY USE OF ITS MATERIALS, PRODUCTS OR SERVICES DESCRIBED HEREIN.

Each user bears full responsibility for making its own determination as to the suitability of Confidex products, materials, services, recommendations, or advice for its own particular use. Each user must identify and perform all tests and analyses necessary to assure that its finished systems incorporating Confidex products, materials, or services will be safe and suitable for use under end-use conditions. Nothing in this or any other document, nor any oral recommendation or advice, shall be deemed to alter, vary, supersede, or waive any provision of this Disclaimer, unless any such modification is specifically agreed to in a writing signed by Confidex.