# PRODUCT DATASHEET

# **Confidex Survivor™**



All-surface tag for logistics, transportation and yard management applications with top performance

# **ELECTRICAL SPECIFICATION**

#### **Device type**

RAIN RFID / EPCglobal Gen2v2

# **Operational frequency**

ETSI 865 - 869 MHz

FCC 902 - 928 MHz

# ETSI IC options and memory configurations Impini M780™

- EPC 496 bit; User 128 bit; TID 96 bit

  NXP UCODE G2iM+
  - EPC 448 bit; User 640 bit; TID 96 bit

# FCC IC options and memory configurations Impinj M780™

- EPC 496 bit; User 128 bit; TID 96 bit Impinj Monza4QT
  - EPC 128 bit; User 512 bit; TID 96 bit

#### **EPC** memory content

Unique number encoded as a default

## Read range (2W ERP)\*

M780:

- On metal up to 27 m / 90 ft
- Other materials up to 10 m / 33 ft

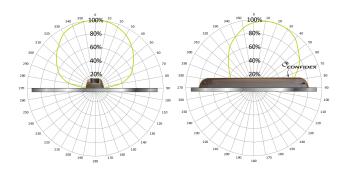
#### M4QT / G2iM+:

- On metal up to 18 m / 60 ft
- Other materials up to 16 m / 52 ft

# Applicable surface materials\*

All surfaces

# **RADIATION PATTERNS**



## MECHANICAL SPECIFICATION

#### Tag materials

High quality engineering plastics.

#### Weight

31 g

#### **Delivery format**

Single

#### Amount in box

100 pcs

#### Dimensions

155mm x 26mm x 14,5mm / 6.1" x 1.02" x 0.57"



#### **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

#### **IP** classification

IP68

# Weather ability

Good, including UV-resistance and sea water

#### **Chemical resistance**

No physical or performance changes in:

- 168h Motor oil exposure
- 48h Salt water (salinity 10%) exposure
- 48h Sulfuric acid (10%, pH 2) exposure
- 48h NaOH (10%, pH 13) exposure

Generally good resistance with moderate concentrations of acids, alcohols, alkalis, detergents and cleaners.

Acetone should be avoided

#### **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.

<sup>\*</sup> Read ranges are theoretical values that are calculated for non-reflective environment. Different surface materials may influence performance.

# PERSONALIZATION OPTIONS

#### **Pre-encoding**

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

#### **Customized data label**

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

#### **Customized laser engraving**

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

## **INSTALLATION INSTRUCTIONS**

Confidex Survivor<sup>TM</sup> can be attached with several fixing methods:

1. High performance acrylic adhesive (not included by default)

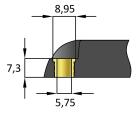
When background adhesive is ordered the tag is delivered with adhesive attached. Clean and dry the surface for obtaining the maximum bond strength. Ideal application temperature is from +21°C to +38°C (+70°F to +100°F), bond strength can be improved with firm application pressure and moderate heating from +38°C to +54°C (+100°F to +130°F). Installation at temperatures below 10°C (50°F) is not recommended.

- 2. Other adhesive fixings
  - Polyurethane adhesives
  - **Epoxies**
  - Silicone sealants

Structural adhesives like 3M DP410 provide very high bond strength and resistance against mechanical stress. When tag is attached with sealant adhesive, insert a layer of sealant under the tag and press the tag on the surface. Increase the bond by adding extra sealant from the tag holes. Adhesive type and thickness may have an effect on tag performance. Insert maximum 2mm layer of adhesive under the tag. Please refer to adhesive supplier for exact fixing instructions and test the performance with chosen adhesive.

## 3. Mechanical fixing

Mechanical fixing recommended to be used in every application that includes risk for high mechanical stress or low temperature during tag fixing. Mechanics are designed for M5 sized screw. Refer the dimensional picture for screw selection.

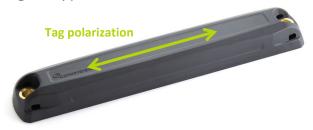


#### 4. Cable tie

Confidex Survivor<sup>™</sup> has specific design that allows also plastic or metallic cable ties to be used for fixing. Maximum width of tie is 4mm. Please see picture below for an example.



Polarization of Confidex Survivor™ is according to its longest dimension. This should be taken into account when using linearly polarized reader antennas.



#### ORDER INFORMATION

Product number: 3004277

Product name: Confidex Survivor™ M780 ETSI

Product number: 3001137

**Product name:** Confidex Survivor<sup>™</sup> G2iM+ ETSI

Product number: 3004278

Product name: Confidex Survivor™ M780 FCC

Product number: 3000856

Product name: Confidex Survivor™ M4QT FCC

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

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