

PRODUCT DATASHEET

Confidex Survivor™



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

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 ETSI

NXP UCODE G2iM+

Memory: EPC 448 bit; User 640 bit; TID 96 bit

IC type FCC

Impinj Monza4QT

Memory: EPC 128 bit; User 512 bit; TID 96 bit

EPC memory content

Unique number encoded as a default

Read range (2W ERP)*

On metal up to 18m / 60ft

Other materials up to 16m / 52 ft

Applicable surface materials*

All surfaces

* 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. In real environment the read range may also be much longer.

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.

MECHANICAL SPECIFICATION

Tag materials

High quality engineering plastics.

Weight

31 g

Delivery format

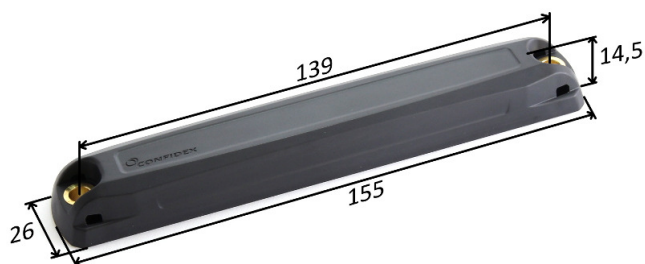
Single

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

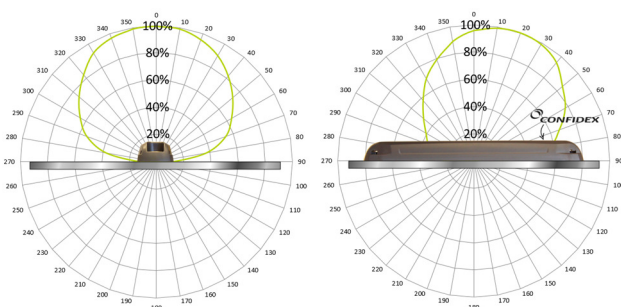
Expected lifetime

Years in normal operating conditions

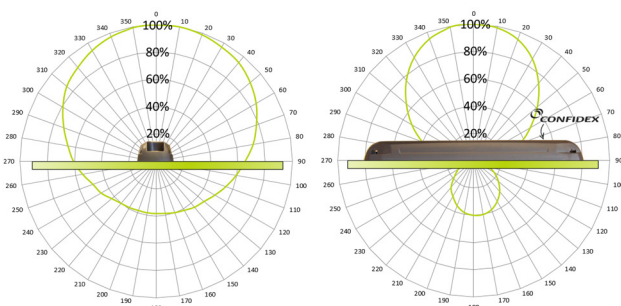
Values in the table are the best recommendations; resistance against environmental conditions depends on the combination of all influencing factors, exposure duration and chemical concentrations. Thus, product's final suitability for certain environmental conditions is recommended to be tested. Contact Confidex for more specific information.

RADIATION PATTERNS

On metal



On plastic



INSTALLATION INSTRUCTIONS

Confidex Survivor™ can be attached with several fixing methods:

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

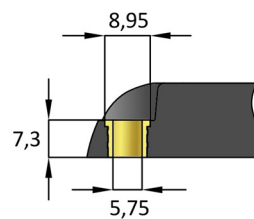
When background adhesive is ordered the tag is delivered with adhesive attached. Clean and dry the surface for obtaining the maximum bond strength. Ideal application temperature is from +21°C to +38°C (+70°F to +100°F), bond strength can be improved with firm application pressure and moderate heating 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. Insert maximum 2mm layer of adhesive under the tag. Please refer to adhesive supplier for exact fixing instructions.

3. Screw or pop rivet

Mechanical fixing is 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™ 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.

ORDER INFORMATION

Product number: 3001137
 Product name: Confidex Survivor™ G2iM+ ETSI

Product number: 3000856
 Product name: Confidex Survivor™ M4QT FCC

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

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