

PRODUCT DATASHEET

Confidex Survivor B™



All-surface tag with extreme performance that is powered with Confidex BOOST™ battery assisted passive technology.

ELECTRICAL SPECIFICATION

Device Type

RAIN RFID / EPCglobal Gen2

Air interface protocol

EPCGlobal Class3 Gen2, compliant with:

- EPCGlobal Class 1 Gen2 (ISO 18000-63)
- AIAG™ B-11
- ATA Spec 2000 Low memory tag
- ISO 18000-64 Type D (TOTAL) with special request

Operational frequency

EU 865 - 869 MHz, US 902 - 928 MHz

IC type

EM4325

Memory configuration

EPC 352 bit; User 3072 bit; TID 48 bit (unique)

EPC memory content

Unique 96 bit EPC encoded as a default

Read range (2W ERP)*

Up to 60m / 200ft

Default mode

Delivered in passive mode with default sensitivity

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. With BAP technology the reader sensitivity is in important role when it comes to maximum read range.

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.

Battery

Disposable lithium battery. Contact Confidex for recycling instructions.

Weight

34 g

Delivery format

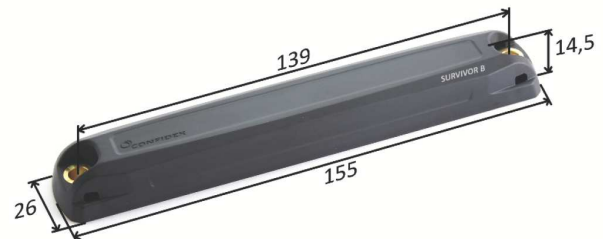
Single

Amount in box

100 pcs

Dimensions

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



ENVIRONMENTAL RESISTANCE

Operating temperature

-20°C to +65°C / -4°F to +149°F

Storage temperature

0°C to +30°C / 32°F to +86°F

Storage humidity

35% to 75%

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

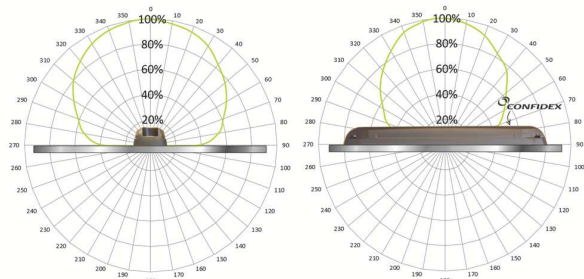
Expected battery lifetime

Years in normal operating conditions with continuous reading. Extreme performances will affect the lifetime.

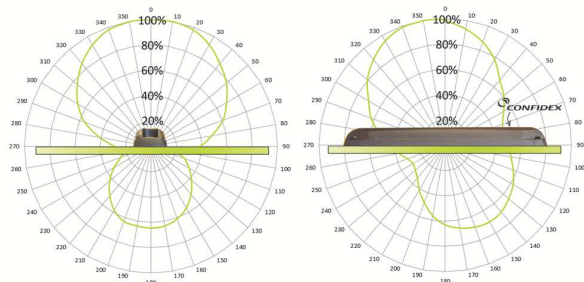
Values in the table are the best recommendations; resistance against environmental conditions depends on the combination of all influencing factors, exposure duration and chemical concentrations. Thus, product's final suitability for certain environmental conditions is recommended to be tested. Contact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

RADIATION PATTERNS

On metal



On plastic



INSTALLATION INSTRUCTIONS

Confidex Survivor B™ can be attached with several fixing methods:

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

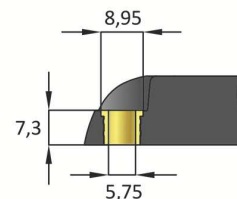
When background adhesive is ordered the tag is delivered with adhesive attached. Clean and dry the surface for obtaining the maximum bond strength. Ideal application temperature is from +21°C to +38°C (+70°F to +100°F), bond strength can be improved with firm application pressure and moderate heating 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.

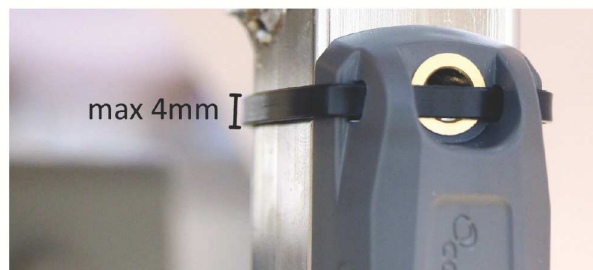
3. Screw or pop rivet

Mechanical fixing is recommended to be used in every application that includes risk for high mechanical stress or low temperature during tag fixing. Refer the dimensional picture for selecting the best size for screw or pop rivet.



4. Cable tie

Confidex Survivor B™ 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 B™ is according to its longest dimension.

ORDER INFORMATION

- Product number:** 3000857
Product name: Confidex Survivor B™ EM4325 ETSI
- Product number:** 3000858
Product name: Confidex Survivor B™ EM4325 FCC

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

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