

PRODUCT DATASHEET

Confidex Corona™



RFID tag with extreme temperature resistance for automotive body manufacturing process.

ELECTRICAL SPECIFICATION

Device type

Class 1 Generation 2 passive UHF RFID transponder

Air interface protocol

EPCGlobal Class1 Gen2 ISO 18000-6C

Operational frequency

Global 865-928MHz

IC type

Impinj Monza R6

Memory configuration

EPC 96 bit; TID 48 bit, 32bit factory locked unique

EPC memory content

Unique number encoded

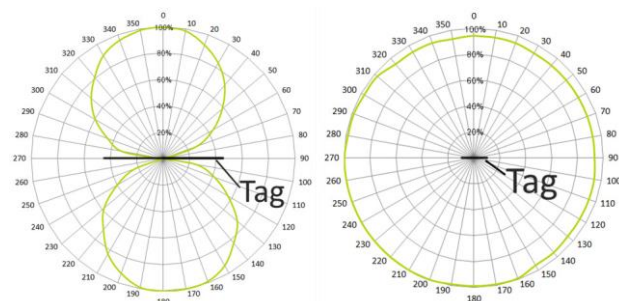
Read range (2W ERP)*

EU: Up to 12 m / 40 ft

US: Up to 10 m / 33 ft

* 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.

RADIATION PATTERNS



MECHANICAL SPECIFICATION

Tag materials

Special polyester material for high temperatures.

Weight

1 g

Delivery format

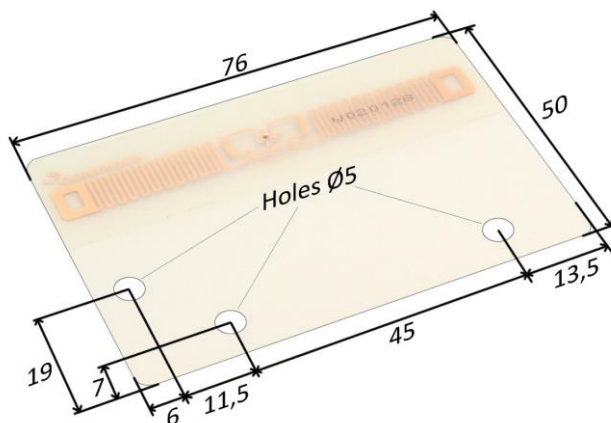
Single

Amount in box

300 pcs

Dimensions

76 x 50 x 0.35 mm / 2.99 x 1.97 x 0.014 in



ENVIRONMENTAL RESISTANCE

Operating temperature

-35°C to +85°C / -31°F to +185°F

Ambient temperature

Long term: -40°C to +125°C / -40°F to +257°F

1 week: -40°C to +180°C / -40°F to +356°F

3 hours: -40°C to +230°C / -40°F to +446°F

IP classification

IP68

Bending resistance

Withstands 50mm radius also in high temperatures

Chemical resistance

No physical or performance changes in:

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

Expected lifetime

Product is designed for single use in vehicle manufacturing. However, the lifetime will be years when tag is left to car body and it can be used for identification in aftersales services.

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 with or without locking

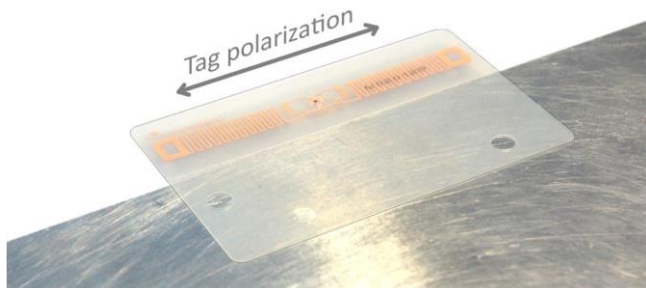
Visual marking

- Laser engraving of customer specific content.

INSTALLATION INSTRUCTIONS

Confidex Corona™ can be attached with screws or pop-rivets through Ø5mm holes. Tag shall be attached on top of metal so that the antenna part is protruded out from metal as shown in picture below. This will maximize the tag reading distance. Tag will also work when attached on a plastic assets.

Polarization of tag is along its longest dimension. This should be taken into account when linear reader antennas are used.



Select the location carefully in a vehicle body as good placement will ensure smooth identification in every stage of manufacturing till the end of assembly line and beyond. Please contact Confidex for further assistance.

ORDER INFORMATION

Product number: 3001106

Product name: Confidex Corona™ MR6

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

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