

# PRODUCT DATASHEET

## Confidex Ironside Slim™



Versatile and narrow tag for global asset tracking applications with excellent performance

### ELECTRICAL SPECIFICATION

#### Device type

Class 1 Generation 2 passive UHF RFID transponder

#### Air interface protocol

EPCGlobal Class1 Gen2 ISO 18000-6C

#### Operational frequency

Global 860-960MHz

#### 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

Unique number encoded as a default

#### Read range (2W ERP)\*

EU, US & JPN on metal up to 8 m / 26 ft

EU, US & JPN off metal up to 4 m / 13 ft

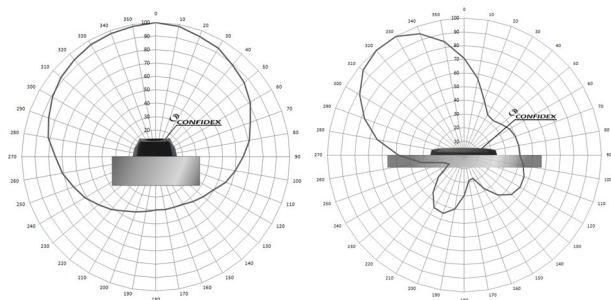
#### Applicable surface materials\*

Ideal application on metal, works on any material

\* 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). EU = 865 - 868 MHz, US = 902 - 928 MHz, JPN = 952-956 MHz. Different surface materials may have an effect on performance.

### RADIATION PATTERNS

#### On metal



### MECHANICAL SPECIFICATION

#### Tag materials

High quality engineering plastics.

#### Weight

15 g

#### Delivery format

Single

#### Amount in box

600pcs

#### Dimensions

84 x 21 x 10 (thickness) mm / 3.3 x 0.83 x 0.39 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

#### IP classification

IP68

#### Chemical resistance

No physical or performance changes in:

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

Acetone should be avoided. For achieving increased chemical tolerance, the tag is designed to be attached with industrial adhesives such as polyurethane adhesives or epoxies.

#### 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.*

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.

To achieve the optimal performance please locate the tag on metal in a way that there is metal on both ends of the tag, like shown below. Ideally the tag is placed on large even metal surface with direct metal contact underneath the whole tag. Tag polarization is along the longest dimension.



ORDER INFORMATION

- Product number:** 3000360
- Product name:** Confidex Ironside Slim Global™ M4QT
- Product number:** 3000598
- Product name:** Confidex Ironside Slim Global™ M4QT ATEX

Following product is available upon special request:

- Product number:** 3000449
- Product name:** Confidex Ironside Slim Global™ M4E

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

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INSTALLATION INSTRUCTIONS

Confidex Ironside Slim™ can be attached with several fixing methods:

1. 3M 300LSE high performance acrylic adhesive (not included by default)

When background adhesive is ordered the tag is delivered with adhesive attached. When mounting the tag with its adhesive background, 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

Silicone sealants like Dow Corning AS 7096 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 silicone sealant supplier for exact fixing instructions.

3. Mechanical fixing

Mechanical fixing is recommended to be used in every application that includes risk for high mechanical stress or low temperature during tag fixing. During fixing make sure there is no air gap left in between the metal surface and tag. Refer the hole dimension picture on the right for selecting the best size for screw.

