PRODUCT DATASHEET

Ironside Slim™

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

ELECTRICAL SPECIFICATION

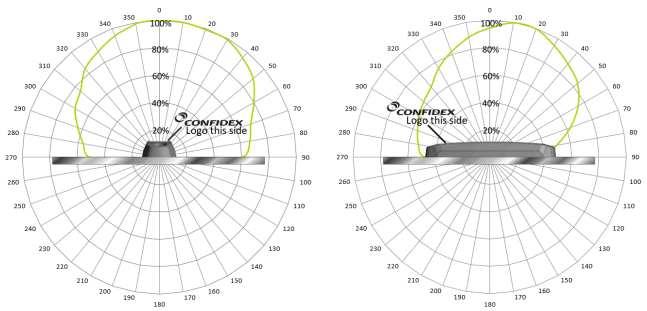
Device type
RAIN RFID / EPCglobal Gen2v2
Operational frequency
Global: 865-928 MHz
IC options and memory configurations
Impinj M780™ - EPC 496 bit; User 128 bit; TID 96 bit
EPC memory content
Unique number encoded as a default
Read range (2W ERP)*
M780 (Global):

- On metal up to 17 m / 55 ft
- Off metal up to 6 m / 20 ft

Applicable surface materials*
Ideal application on metal, works on any material

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

RADIATION PATTERNS



MECHANICAL SPECIFICATION

Tag materials
High quality engineering plastics.
Weight
15,5 g
Delivery format
Single
Amount in box
600 pcs
Dimensions
85 x 21 x 10 mm / 3.35 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 Zebra for more specific information.

INSTALLATION INSTRUCTIONS

Ironside Slim™ can be attached with several fixing methods:

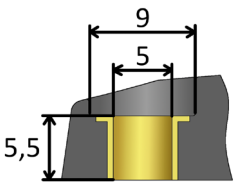
1. High performance acrylic adhesive (not included by default)

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 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. Hole dimensions are identical with and without compression limiters. Ironside Slim comes by default with compression limiters included. DIN 7985 M4 screws can be used as a reference.

Ideally the tag is placed on large even metal surface with direct metal contact underneath the whole tag. If placement to edge is needed follow below guidance on positioning and leave metal on the left side for the best performance. Tag polarization is along the longest dimension. This should be taken into account when using linearly polarized reader antennas.

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.

Personalization Kit

- Ironside Slim™ is available also as a Personalization kit where 700 blank PET data labels are delivered on reel per each box of 600 tags. Labels can be printed with standard label printers. Resin ribbon is recommended for best durability.

ORDER INFORMATION

Zebra part number: 10041053
Product name: Ironside Slim™ M780

For additional information and technical support, please contact your Authorized Zebra Reseller or Zebra Technical Support.

ZEBRA
www.zebra.com

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