

Product Datasheet

BEONTAG IRONSIDE MICRO



Description

On-metal tag with square inch foot print for various metal asset tracking applications.



Electrical specifications

Device type

UHF RFID / EPCglobal Gen2v2

Operational frequency

Global 865-928MHz

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)*

On metal up to 7 m / 23 ft

On plastic up to 2 m / 7 ft

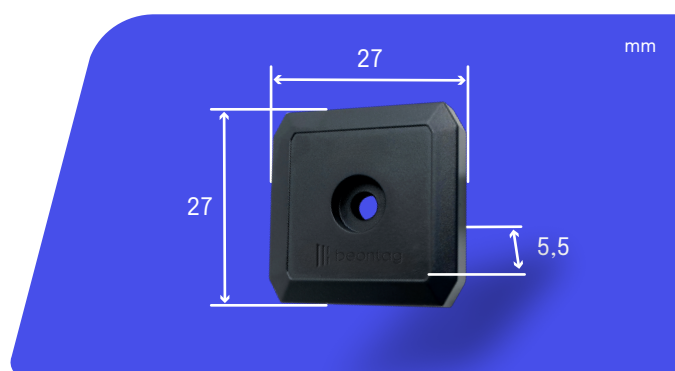
Applicable surface materials*

Works on any material but optimized for metallic items

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



Mechanical specifications



Tag materials

High quality engineering plastics

Amount in box

500 pcs

Weight

4,3 g

Dimensions

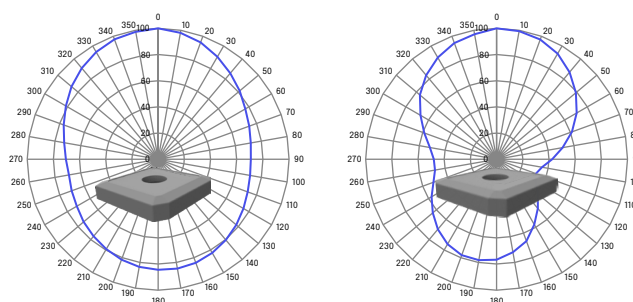
27 x 27 x 5,5 mm /
1.06 x 1.06 x 0.22 in

Delivery format

Single



Radiation pattern



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.



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:

- 168h Motor oil exposure

- 168h Salt water (salinity 10%) exposure
- 5h Sulfuric acid (10%, pH 2) exposure
- 1h NaOH (10%, pH 13) exposure
- Acetone, contact 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.



Installation instructions

Beontag Ironside Micro 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. 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

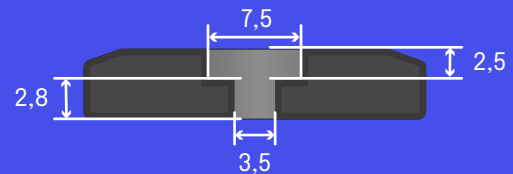
Structural adhesives such as 3M DP110 and SikaFast 5215 provide very high bond strength and resistance against mechanical stress. When tag is attached with structural adhesive, insert a layer of adhesive under the tag and press the tag on the surface. Increase the bond by adding extra sealant from the tag hole. Insert maximum 2mm layer of adhesive under the tag. Please contact adhesive supplier for exact fixing instructions.

3. Mechanical fixing

- Screws (size M3)
- Pop rivets
- Plastic rivets (size 3mm)

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.



Polarization of Ironside Micro is in 45° angle to the Beontag logo like shown in following picture. This should be taken into account when linearly polarized reader antennas are used.



To achieve the optimal performance please locate the tag on metal like shown below. Ideally the tag is placed on large even metal surface with direct metal contact underneath the whole tag.



This angle must be close to the edge of the metal surface.



Order information

Product number: **3004169**

Product Name: **Beontag Ironside Micro M780**

For other versions, additional
information and technical support
please contact Beontag.

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From the science of graphic and label materials, RFID and wireless IoT enablers, we create solutions across the value chain to deliver digital transformation for businesses around the world.

Sustainability is at the core of what we do and we strongly believe that by substituting non-renewable materials and innovating through more sustainable and renewable products, we act as an ESG enabler for our customers' value chain.

Beontag is one of the world's leading providers of RFID and wireless IoT solutions, being present in more than 40 countries with 7 R&D centers and 2,000 employees, in constant development of technological and sustainable solutions designed to connect items, and gain efficiency and end-to-end traceability

CONTACT US FOR
MORE INFORMATIONS:
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