



### 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
- NXP UCODE 9xm  
3 Customer configurable memory options:
  1. EPC 128 bit; User 752 bit; TID 96 bit
  2. EPC 256 bit; User 624 bit; TID 96 bit (as default)
  3. EPC 496 bit; User 384 bit; TID 96 bit

**EPC memory content**

Unique number encoded as a default

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

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

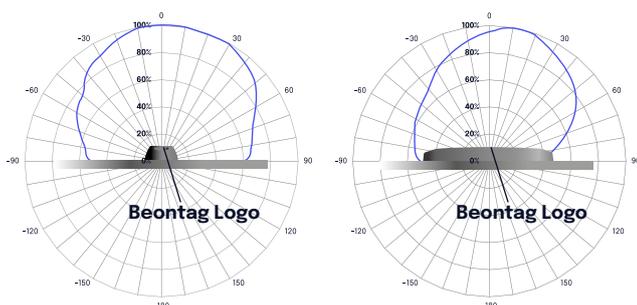
**Applicable surface materials\***

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 pattern



### Description

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



### Mechanical specifications



**Tag materials**

High quality engineering plastics

**Amount in box**

600 pcs

**Weight**

15,5 g

**Dimensions**

85 x 21 x 10 mm /  
 3.35 x 0.83 x 0.39 in

**Delivery format**

Single



### 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**

Beontag 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.



## 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 Beontag for more specific information.



## Installation instructions

**Beontag 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

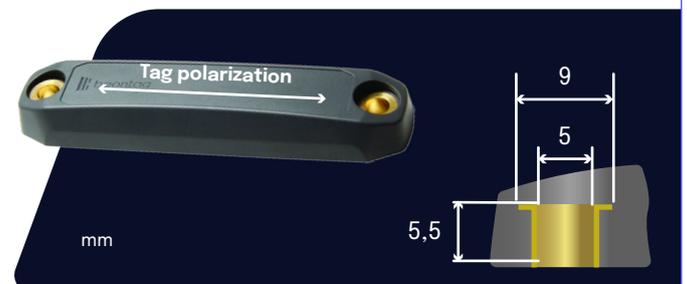
- Polyurethane adhesives
- Epoxies
- Silicone sealants

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. Tag orientation as shown with arrow should be considered when using linear reader antennas.





## Order information

Product number: **3004162**

Product Name: **Beontag Ironside Slim M780**

Product number: **3004967**

Product Name: **Beontag Ironside Slim 9xm**

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 INFORMATION:  
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