Product Datasheet

BEONTAG FERROWAVE MICRO REGIONAL

Description

Ferrowave Micro is optimized for item-level, high volume tracking of specialty retail categories such as sports equipment, beauty and personal care items and also serves as brand authentication for high value goods.

Electrical specifications

Device type
RAIN RFID / EPC global Gen2v2

Operational frequency
ETSI: 865 - 868 MHz
FCC: 902-928 MHz

IC options and memory configurations
NXP UCODE 9
96 bit EPC memory, 96 bit TID

EPC memory content
Unique random 96 bit EPC

Read range (2W ERP)*
On metal up to 5,5m / 18 ft

Applicable surface materials*
Optimized for metal but works on any surface

* 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). Performance may vary depending on surface materials.

Printer Compatibility

Beontag Ferrowave Micro™ is tested to work with the following printers:

- Zebra ZT411 On Metal
- Sato CL4NX
- Printronix Auto ID T6000e

For printing instructions please contact Beontag

Mechanical specifications

Label surface
Printable white PET, resin ribbon recommended

Background adhesive
General purpose permanent adhesives

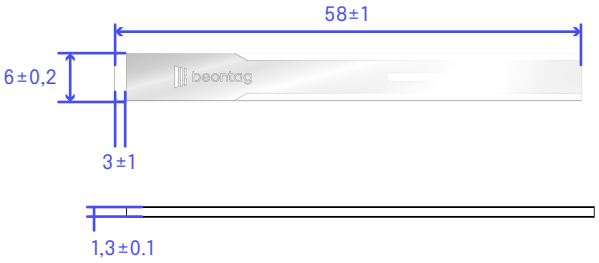
Weight
0,25 g

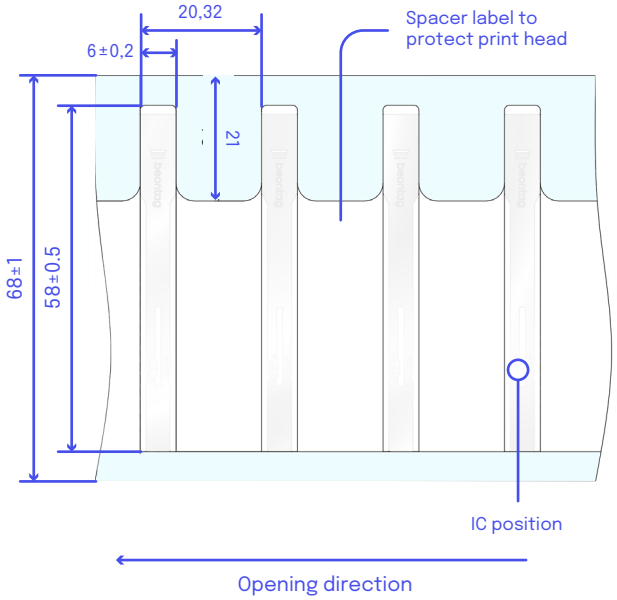
Delivery format
800 pcs good labels on reel, bad ones marked with “XXX” printing.

Pitch on reel
20,32 mm / 0.8”

Reel core inner diameter
76 mm / 3”

Tag dimensions
58 x 6 x 1,3 mm





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Environmental resistance

Operating temperature
-35°C to +85°C / -31°F to +185°F

IP classification
IP68, tested for 5 hours in 1m deep water

Storage condition
1 year in +20°C / 50% RH

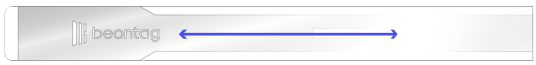
Expected lifetime
Years under normal operating conditions

Other comments
Tolerates industrial washing with standard solvents. Washing durability is recommended to be tested in the final application.

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

Tag polarization



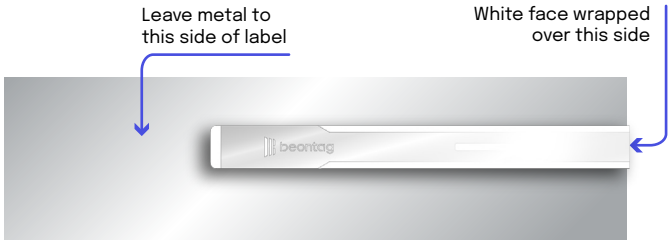
When mounting the label with its adhesive, clean and dry the surface for obtaining the maximum bond strength. Typical cleaning solvents are heptane or acetone for oily surfaces; or isopropyl alcohol for plastics. Do not use household cleaning solvents that contain oils. Carefully read and follow the manufacturer's precautions and directions for use when working with solvents.

Ideal application temperature is from +16°C to +38°C (+60°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). Application at temperatures below 10°C (50°F) is not recommended. Final bond strength is achieved in 72 hours. Attachment on curved surface is highly recommended to be done along the asset, as shown in below drawing. This orientation would ensure better performance and adhesion.

For optimal read range it is important to test different placement of label on the actual asset. It is recommended to leave metal at least to non-folded end of the label as shown below.

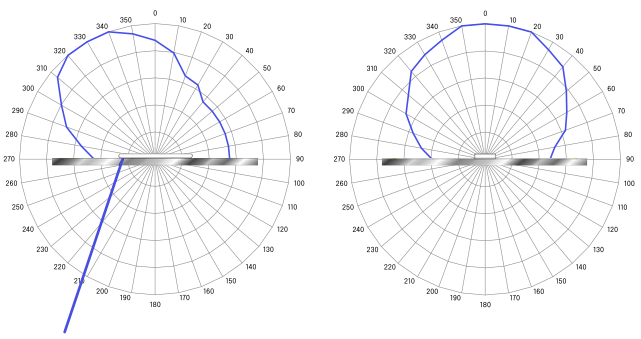
When attaching the label, ensure the following:

- Select a smooth surface without uneven areas below tag
- Avoid touching the background adhesive and IC location



Radiation pattern

Radiation pattern is heavily impacted by the shape and material of the tagged asset. Below pattern is measured on metallic plate. It isrecommended to test the optimal positioning on an actual asset.



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Order information

Product number: **3004749**
Product Name: **Beontag Ferrowave Micro U9 FCC**

Product number: **3004750**
Product Name: **Beontag Ferrowave Micro U9 ETSI**

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

Personalization options

Pre-encoding
On request

Visual Marking
B&W printing on request

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About Beontag

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:
beontag.com

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