Product Datasheet

BEONTAG FERROWAVE FLAG



Description

Versatile, printable, and cost-efficient UHF RFID on metal label for item-level tracking.

Electrical specifications

Device type
RAIN RFID / EPCglobal Gen2v2

Operational frequency
GLOBAL: 865-928 MHz

IC options and memory configurations
NXP UCODE 9: 96 bit EPC
Impinj M730: 128 bit EPC
Impinj M780: 496 bit EPC; 128 bit user memory

EPC memory content
Same EPC by default

Read range (2W ERP)*
On metal up to 22m / 75ft
Off metal up to 7m / 23ft

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). Different surface materials may have an effect on performance.

Personalization options

Pre-encoding
On request

Visual Marking
B&W printing on request

Mechanical specifications

Label surface
Printable white PET, resin ribbon recommended

Background adhesive
Permanent adhesive for general purpose use

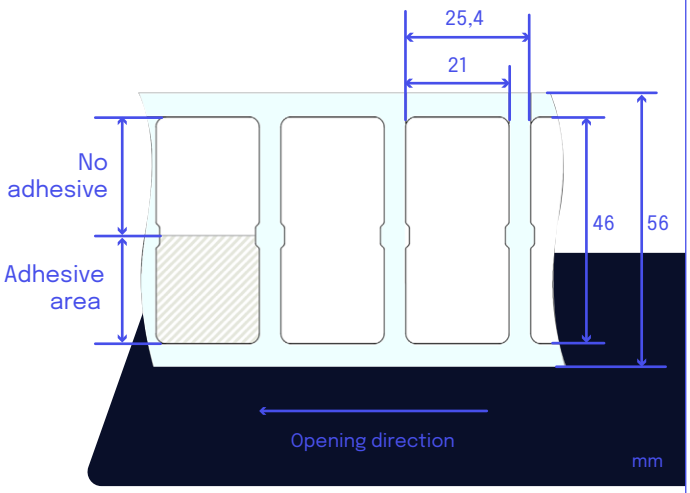
Weight
0,2 g

Delivery format
2000 pcs good labels on reel, bad ones marked with “XXX” printing.

Pitch on reel
25,4 mm / 1”

Reel core inner diameter
76 mm / 3”

Tag dimensions
46 x 21 x 0.2 mm / 1.81 x 0.83 x 0.01”



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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

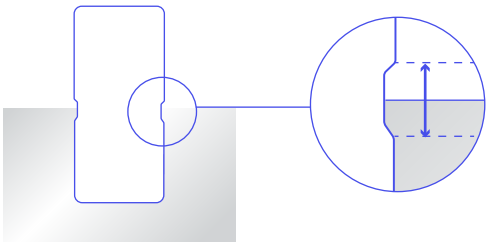
Chemical conditions
No physical or performance changes in:
- 168h Sulfuric acid (10%, pH 2)
- 168h Motor oil
- 24h Salt water (salinity 10%)
- 2h NaOH (10%, pH 13)
- 30min Acetone exposure

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

Other comments
Tolerates cleaning with standard solvents. Industrial pressure washing not recommended.

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



For easier installation Ferrowave Flag has a shape that indicates the optimal position for the metal edge. When attaching the tag ensure that metal edge is within the indicated area for optimal performance.

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.

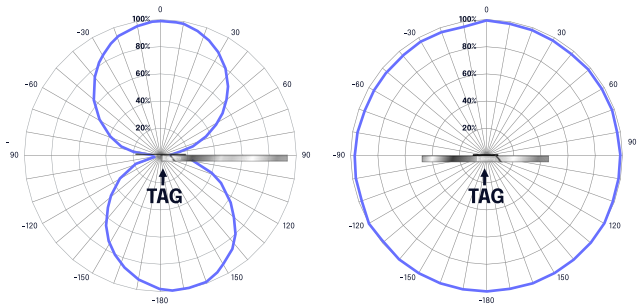
Standard polarization is along the tag's longest dimension. As the Ferrowave Flag uses metallic asset as part of the antenna the asset may also affect the polarization.

Performance of the tag will vary depending on the installation location. Therefore it is recommended to test the optimal location for the tagged asset. You may also contact Beontag for recommendations.

Smallest recommended bending diameter of the Ferrowave Flag is 50mm. Smaller radius might have an effect on adhesion depending on the surface material.

Radiation pattern

Radiation pattern is heavily affected by the shape of the tagged asset. Testing in real environment is recommended to find the best orientation and location for the tag.



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Order informations

Product number: **3005191**
Product Name: **Beontag Ferrowave Flag M730**

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

Product number: **3005192**
Product Name: **Beontag Ferrowave Flag U9**

Product number: **3005352**
Product Name: **Beontag Ferrowave Flag M780**

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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

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CONTACT US FOR MORE INFORMATIONS:
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