# **BEONTAG FERROWAVE MICRO THIN**







# **Description**

Ferrowave Micro Thin 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 a brand authentication for high value goods.



# **Electrical specifications**

# **Device type**

RAIN RFID / EPC global Gen2v2

# **Operational frequency**

FCC: 902-928 MHz

# IC options and memory configurations

Impinj M830™

128 bits of EPC memory, 0 bist of User memory

### **EPC** memory content

Unique random 96bit EPC in every label

# Read range (2W ERP)\*

On metal up to 3 m

#### Applicable surface materials\*

Works on any surface

#### **Attachment on curved surface**

Label can be attached on a curved surface



# Personalization options

#### **Pre-encoding**

Customer-specific encoding of EPC. Locking permanently or with password.

#### **Customized printing**

Customer-specific layout, including logo, text, numbers, barcodes etc.



# **Mechanical specifications**

#### Label surface

Standard white PET (glossy)

# **Background adhesive**

General purpose permanent adhesives

#### Weight

Approx. 0,2 g

# **Delivery format**

1000 pcs good labels on reel, bad ones marked with "XXX" printing.



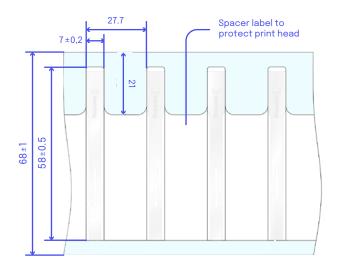
**Pitch on reel** 27,7 mm / 1,09"

# Reel core inner diameter

76 mm / 3"

# **Tag dimensions**

58 x 7 x 0,785 mm



Opening direction

<sup>\*</sup> Read ranges are theoretical values that are calculated for non-reflective environment. Different surface materials may have an effect on performance.

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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

#### Other comments

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

Environmental values are the best recommendations; resistance against different 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..



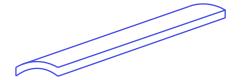
# Installation instructions

# 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.

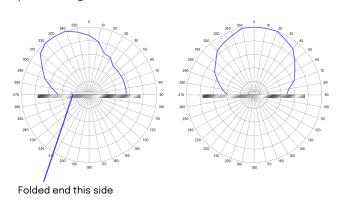


For optimal read range it is important to test different placement of label on the actual asset. For metallic assets and surfaces, it is recommended to leave metal at least to non-folded end of the label as shown below.



# Radiation pattern

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



# V.1.0 - UPDATED SEP.25

# Product Datasheet BEONTAG FERROWAVE MICRO THIN





Product number: 3005735

Product Name: Beontag Ferrowave Micro Thin M830 FCC

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.

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