



## Description

RFID label for reliable logistics with 360 degree read angle combined to performance of latest IC generation.



## Electrical specifications

### Device type

RAIN RFID / EPCglobal Gen2v2

### Operational frequency

Global 865–928MHz

### IC options and memory configurations

Impinj M730™

- EPC 128 bit; TID 96 bit

Impinj M780™

- EPC 496 bit; User 128 bit; TID 96 bit

### EPC memory content

Unique random 96bit EPC in every label

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

On plastic up to 11 m / 36 ft

On cardboard up to 9 m / 30 ft

### Applicable surface materials\*

Non-metallic surfaces

\* 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

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

### Customized printing

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



## Mechanical specifications

### Face material

Printable matt coated paper

### Background adhesive

General purpose permanent adhesive

### Delivery format

Standard: 1000 pcs on reel

4x2": 1000 pcs on reel

4x6": 500 pcs on reel

### Pitch on reel

Standard:

79,375 mm / 3.125"

4x2": 55,245 mm / 2.175"

4x6": 155,6 mm / 6.126"

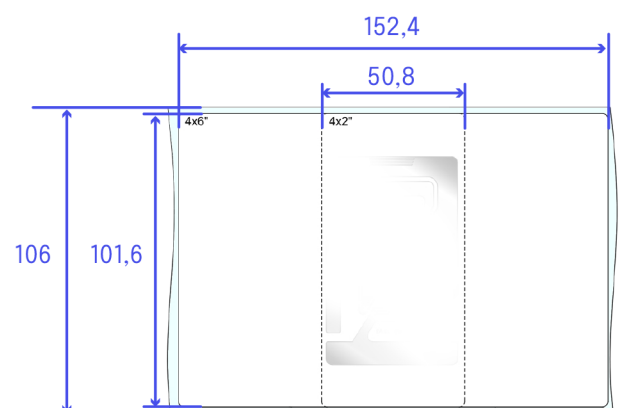
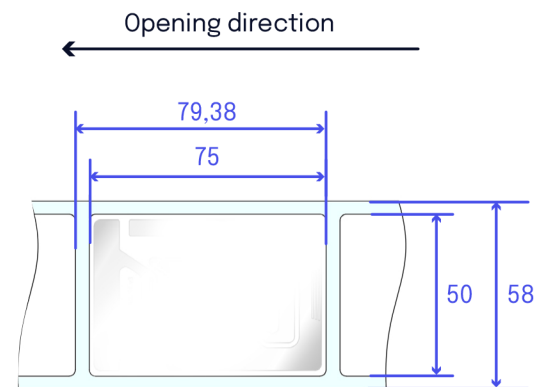
### Reel core inner diameter

76 mm / 3"

### Tag dimensions

Standard: 75 x 50 x 0,2mm

/ 2.95 x 1.96 x 0.01"





## 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

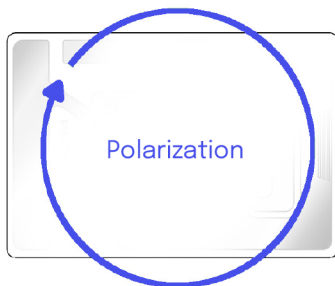
Years in normal operating conditions

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 Crosswave Neo is designed to have a constant reading performance in all orientations even when using linear reader antenna.



Ideal installation conditions are +20°C (+68°F) / 50% RH. For exceptional conditions, please contact Beontag. Adhesive of the Beontag Crosswave Neo labels will provide best adhesion in 24 hours after the installation. Bond strength can be improved with firm application pressure. Always clean and dry the surface for obtaining the maximum bond strength. Avoid touching the background adhesive.

Minimum bending diameter of the label is defined to be 50mm. Do not bend the label below the limit. Never touch on the location of the IC. IC is a sensitive electrical component and can be damaged if unexpected pressure is applied on the chip.



## Order informations

Product number: **3003492**

Product name: **Beontag Crosswave Neo M730**

Product number: **3003720**

Product name: **Beontag Crosswave Neo 4x2" M730**

Product number: **3003721**

Product name: **Beontag Crosswave Neo 4x6" M730**

Product number: **3004226**

Product name: **Beontag Crosswave Neo M780**

Product number: **3004239**

Product name: **Beontag Crosswave Neo 4x2" M780**

Product number: **3004240**

Product name: **Beontag Crosswave Neo 4x6" 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

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