



## Description

RFID on metal label optimized for packaging and component tracking



## Electrical specifications

### Device type

UHF RFID / EPCglobal Gen2v2

### Operational frequency

ETSI: 865 - 869MHz

FCC: 902 - 928 MHz

### IC type

Impinj Monza R6-P

NXP UCODE 8m:

### Memory configuration

Monza R6-P: EPC 96/128 bit; User 32/64 bit; TID 96 bit

NXP UCODE 8m: EPC 96 bit; User 32 bit; TID 96 bit

### EPC memory content

Monza R6-P: Unique random EPC in every label

NXP UCODE 8m: Unique random EPC in every label

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

Surface	Monza R6-P		UCODE 8m	
	ETSI	FCC	ETSI	FCC
Metal	4m	5m	4m	5m
Liquid	2m	2m	1m	1m
Plastic	5m	8m	3m	3m
Glass	12m	12m	7m	5m
Cardboard	4m	6m	2m	2m

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

Surface	Monza R6-P		UCODE 8m	
	ETSI	FCC	ETSI	FCC
Metal	13ft	16ft	13ft	16ft
Liquid	7ft	7ft	3ft	3ft
Plastic	16ft	26ft	10ft	10ft
Glass	40ft	40ft	23ft	16ft
Cardboard	13ft	20ft	7ft	7ft



## Mechanical specifications

### Label surface

Printable white PET, resin ribbon recommended

### Background adhesive

High performance acrylic adhesive

### Weight

0,8 g

### Delivery format

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

### Pitch on reel

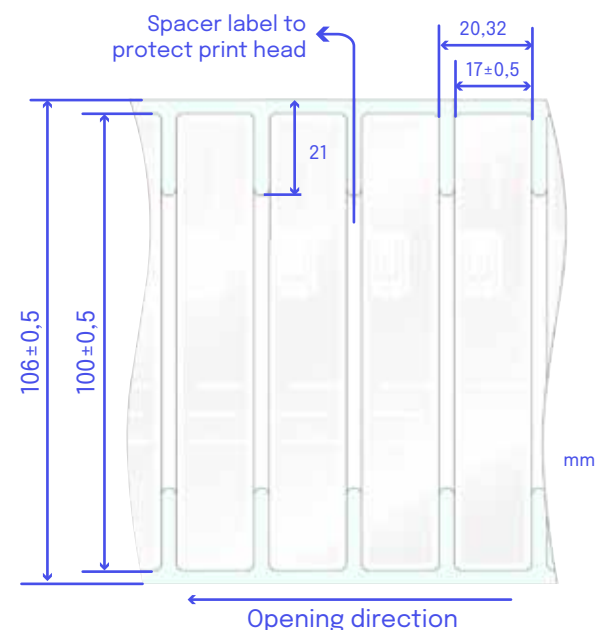
20,32 mm / 0.8"

### Reel core inner diameter

76 mm / 3"

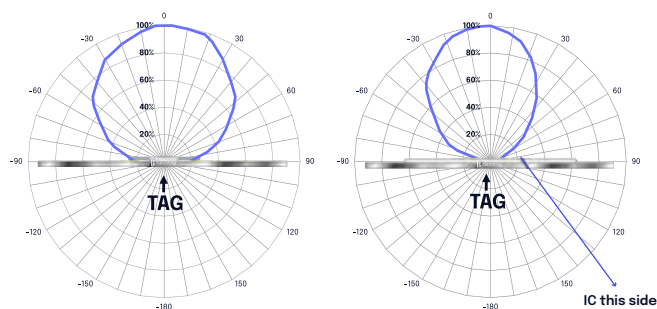
### Tag dimensions

100 x 17 x 1,1 mm / 3.94 x 0.67 x 0.04





### Radiation pattern



### Environmental resistance

#### Operating temperature

-35°C to +85°C / -31°F to +185°F

#### Peak temperature

+110°C / 230°F for 10min

#### Water resistance

IP68, tested for 5 hours in 1m deep water

#### Washing resistance

Tolerates washing with standard solvents. Washing process should be tested in final application.

#### Chemical resistance

No physical or performance changes in:

- 168h Motor oil exposure
- 168h Saltwater (salinity 10%) exposure
- 24h Sulfuric acid (10%, pH 2) exposure
- 24h NaOH (10%, pH 13) exposure

Acetone should be avoided

#### Storage condition

1 year in +20°C / 50% RH

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 attaching the label ensure the following

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

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 +17°C to +30°C (+62°F to +86°F), bond strength can be improved with firm application pressure and moderate heating up to 50°C (122°F). Application at temperatures below 15°C (59°F) is not recommended.

Minimum recommended bending diameter of the **Beontag Ferrowave Classic** is 100mm. Smaller diameters are recommended to be tested in final application. For optimal performance please bend the label in the orientation shown below.



### Printer Compatibility

#### The Beontag Ferrowave Classic is tested and verified to work with the following printers:

- Zebra ZT411 On Metal
- Zebra ZT410 Silverline
- Sato CL4NX
- Printronix Auto ID T6000e
- Printronix Auto ID T4000



### Order information

Product number: **3003132**

Product name: **Beontag Ferrowave Classic MR6-P ETSI**

Product number: **3003130**

Product name: **Beontag Ferrowave Classic MR6-P FCC**

Product number: **3003082**

Product name: **Beontag Ferrowave Classic UCODE 8m ETSI**

Product number: **3003074**

Product name: **Beontag Ferrowave Classic UCODE 8m FCC**

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

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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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