Description

Optimized for ESD plastics with excellent performance and durability

Electrical specifications

Device type
RAIN RFID / EPCglobal Gen2v2

Operational frequency
ETSI 865 – 868 MHz
FCC 902 – 928 MHz

IC type
Impinj M780
496 bit EPC, 128 bit user, 96 bit TID

EPC memory content
Unique random 96 bit EPC

Applicable surface materials*
All surfaces, optimized for ESD plastics

Attachment on curved surface*
Label can be attached on a curved surface. Check installation instructions for more details.

Read range (2W ERP)*

	ETSI label	FCC label
On Metal	14m / 46ft	14m / 46ft
ESD Plastic	6m / 20ft	9m / 30ft
Plastic	6m / 20ft	6m / 20ft
Liquid container	5m / 16ft	8m / 26ft

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

Mechanical specifications

Tag materials
White PET with good printability. Resin ribbon recommended for best durability.
High tack adhesive with excellent adhesion to all surfaces including ESD plastics.

Weight
1,5 g

Delivery format
300 pcs good labels on reel, bad ones marked with "XXX" printing.
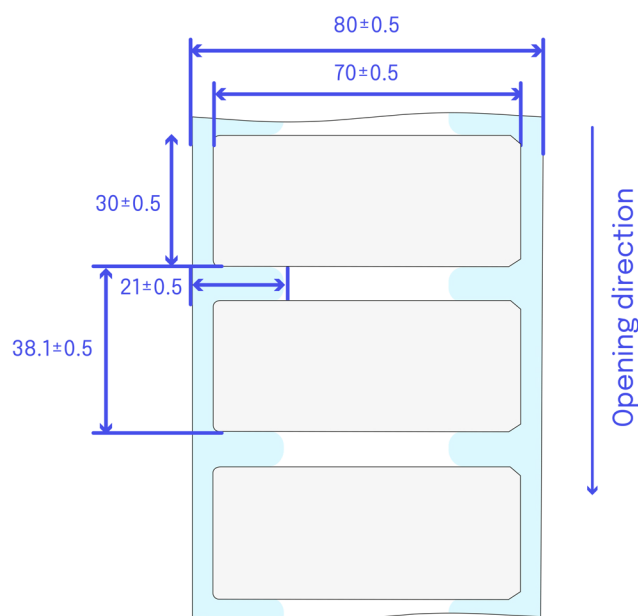
Pitch on reel
38,1 mm / 1.5"

Reel core inner diameter
76 mm / 3"

Tag dimensions
70 x 30 x 1,3 (mm)
2.76 x 1.18 x 0.05 inch

80±0.5
70±0.5
30±0.5
21±0.5
38.1±0.5
Opening direction

Environmental resistance

Operating temperature
'–40°C to +85°C / –40°F to +185°F

Peak temperature
+110°C / 230°F for 10min

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

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

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.

Personalization options

Pre-encoding
On request

Visual marking
B&W printing on request
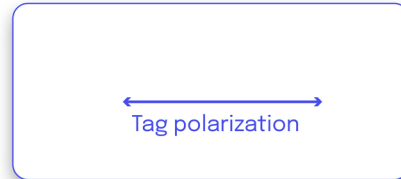
Printer Compatibility

The Beontag ESD On Metal Label 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

For printing instructions please contact Beontag.

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 +21°C to +38°C (+70°F to +100°F). Bond strength can be improved with firm application pressure and moderate heating up to +54°C (+130°F). Application at temperatures below 10°C (50°F) is not recommended.

Optimal read range is achieved when label is attached close to the edge of metal asset, like shown in below picture.

Leave metal to this side of label

White face wrapped over this side

Smallest recommended bending diameter of the **Beontag ESD On Metal Label** is 100mm. For optimal performance please bend the label in the orientation shown below.

Order information

Product number: **3005380**   Product name: **ESD on metal label 70x30 M780 ETSI**

Product number: **3005552**   Product name: **ESD on metal label 70x30 M780 FCC**

Protective over-lamination: Contact Beontag for item details.
For 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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