Product Datasheet

BEONTAG STEELWAVE CLASSIC

Description

Thin all-surface-tag solution for returnable transit item tracking with extreme performance.

Electrical specifications

Device type
UHF RFID / EPCglobal Gen2v2

Operational frequency
ETSI 865 - 869 MHz
FCC 902 - 928 MHz

IC options and memory configurations
Impinj M780™
EPC 496 bit; User 128 bit; TID 96 bit

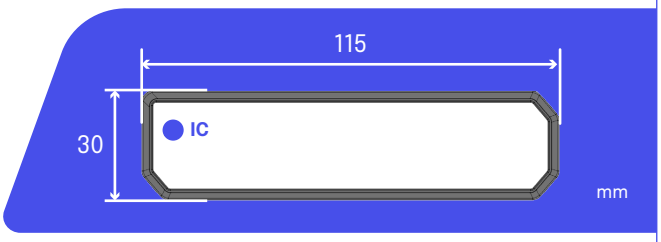
EPC memory content
Unique number encoded as a default

Read range (2W ERP)*
M780
- On metal up to 20 m / 65 ft
- Off metal up to 14 m / 46 ft

Applicable surface materials*
All surfaces

* Read ranges are theoretical values that are calculated for non-reflective environment. Different surface materials may influence performance.

Mechanical specifications



Tag materials
High quality engineering plastic. By default delivered without printing. Personalized printing protected with cover film.

Background adhesive
High performance acrylic adhesive specifically for metal and painted metal surfaces

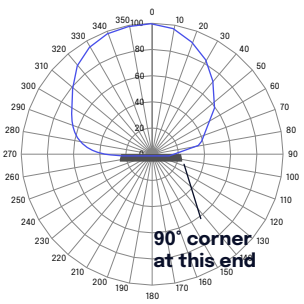
Weight
15,5 g

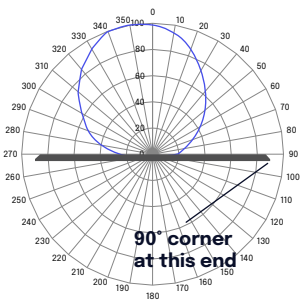
Delivery format
Single

Amount in box
50 pcs

Dimensions
115 x 30 x 3,9 mm / 4.53 x 1.18 x 0.15 in

Radiation pattern





Order informations

Product number: **3004193**
Product Name: **Beontag Steelwave Classic M780 ETSI**

Product number: **3004194**
Product Name: **Beontag Steelwave Classic M780 FCC**

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

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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.
- Printing is protected with additional cover film.

Customized laser engraving
Customer specific layout including logo, text, numbers, barcodes etc.

Personalization Kit
Steelwave Classic also available as a Personalization Kit where RFID label is delivered on a 1000pcs reel separately to the hard plastic part. RFID label can be printed and encoded with standard RFID printers and is easy to apply on plastic part before taken into use. Reel width 112mm. Label is shaped to allow attachment only in one direction. Follow the same installation instructions when attaching the RFID label to plastic part as described in the next chapter.

Installation instructions

Steelwave Classic polarization is along the longest dimension of the tag like shown below.
When attaching the tag ensure the following

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

When mounting the tag with its adhesive background, clean and dry the surface for obtaining the maximum bond strength. Typical cleaning solvents are heptane or isopropyl alcohol. 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.
Remove the liner and place the tag on the correct location. 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. If application is done at temperatures below 10°C (50°F) surface must be extremely clean, dry and it has to be warmed before attaching the tag to achieve best possible adhesion. Keep the tags in warm before attaching.supplier for exact fixing instructions and test the performance with chosen adhesive.

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

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

Chemical resistance
No physical or performance changes in:
- 168h Sulfuric acid (10%, pH 2) exposure
- 168h Motor oil exposure
- 168h Salt water (salinity 10%) exposure
- 1h NaOH (10%, pH 13) exposure

Acetone should be avoided.

Storage condition
1 year in +20°C / 50% RH (shelf life for adhesive)

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.

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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

CONTACT US FOR MORE INFORMATIONS:
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