

ON-METAL HARDY 13



Global Tag **ON-METAL HARDY_13** is a compact round UHF RFID tag with a diameter of 13 mm, specifically designed for on-metal applications requiring high performance in a very small format. Its compact design makes it suitable for installations where the available mounting area is limited.

Suitable for both indoor and outdoor environments, HARDY_13 is ideal for the identification and tracking of metal assets, tools, components and industrial equipment. It can be installed using optional 3M adhesive or mechanically fixed through the integrated mounting hole, allowing quick and flexible installation.

Despite its compact size, HARDY_13 can reach a reading distance of up to 120 cm when used with a fixed 2W RFID reader and external antenna, offering an effective balance between small dimensions and reliable RFID performance. This makes it particularly suitable for industrial, manufacturing, maintenance and asset tracking applications.

MECHANICAL AND ENVIRONMENTAL SPECIFICATIONS

Dimensions: 13mm diameter (0,51inch); thickness:2,8mm (0,11inch)

Mounting System: Rivet Holes (two holes): ϕ 2mm (0,079 in) or Adhesive (3M)

Weight: 0,6gr.

Material: PCB Material

Color: Generally black color – Available optionally any other colors

Class Protection: IP67

Storage Temperature: -55°C (for 3h) to +100°C (for 2h) / -67°F (for 3h) to +230°F (for 2h) (for any other particular request contact us)

Operating Temperature: -25°C to +85°C / -13°F to +185°F

Weather Ability: Very Good, including UV resistance and sea water

Delivery format: Individual

Expected lifetime: Years in normal operating conditions

Chemical resistance:

No physical or performance changes in (tested up to, more hours can be):

- 200 hours Motor oil immersion
- 200 hours Salt water (salinity 10%) exposure
- 200 hours H₂SO₄ Sulfuric acid (10% pH 2) exposure
- 24 hours NaOH Caustic Soda (10%, PH 13) exposure
- 24 hours HCl Muriatic Acid (10%) exposure
- 24 hours Na₂CO₃ Soda Solvay
- 24 hours NH₃ Ammoniac (5% to 25%)

Values in the table are the best recommendations; resistance against environmental conditions depends on the combinations of all influencing factors, exposure duration and chemical concentrations. Thus, product's final suitability for certain environmental conditions is recommended to be tested. We are available for other information.

CHIP SPECIFICATION AVAILABLE:

	UHF 860-960MHz
Device type	Class 1 Gen 2
Air interface protocol	ISO18000-63
IC Type Available	Alien Higgs3, Alien Higgs3, NXP U-Code8, NXP U-Code9 others on-request
Read Range	120cm with 2W ERP (* Tested with LRU1200 Feig Electronics© and Antennas 270x270mm with 9db gain)

CUSTOMIZATION OPTIONS:

Laser engraving: serial progressive number from database, randomize number from database text and Barcode or QRCode. Other customizations on request.

Pre-Encoding: Customer specific encoding of EPC or User Memory (also from Database). Locking permanently or with password. Insert into Database TID code.

INSTALLATION MODE:

With 3M Adhesive model: when mounting the tag with adhesive background, clean and dry the surface to get the maximum bond strength. Through the 3 holes (n.2 1mm diam. holes; n.1 2mm diam. hole)

Through holes: n.2 2mm diam. holes; n.4 1mm diam. holes

APPLICATION NOTE:

On-Metal Bins management: **ON-METAL HARDY** with small size but high performance can be used to track and manage bins even when they are outdoors or in harsh conditions.

On Metal Waste bin management: **ON-METAL HARDY** can be applied on-metal waste bins.

Logistics, supply chain and Yard management: **ON-METAL HARDY** is made to control container, pallets, carts, construction vehicles or again other metallic components.

Maintenance On-Metal assets: **ON-METAL HARDY** is a strong tag used to improve the maintenance service with easy method to be installed on -metal surface.

ORDER INFORMATION:

Standard product is made with Alien Higgs3 chip

PRODUCT CODE: GT-HRDY_13-xx (xx defines the selected IC chip)

For printing options or for produce transponder with different color or with other type of customization... contact us for more information:

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