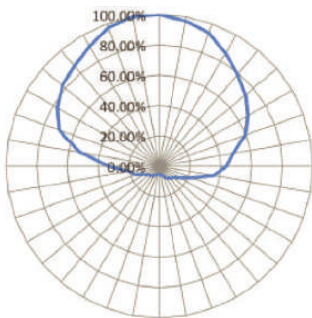




# MICRO INDUSTRIAL

## Technical Specifications

- **RF protocol** EPC global Class 1 Gen 2
- **Frequency** 902–928 MHz (US); 865–868 MHz (EU)
- **IC type (chip)**<sup>1</sup> Alien Higgs 9
- **Chip memory**<sup>2</sup> 96 bits EPC; 96 bits TID; 688 bits user memory
- **Write cycles** 100,000 cycles
- **Read range fixed**<sup>3</sup> Up to 32.81ft (10 m)
- **Read range handheld**<sup>3</sup> Up to 22.97ft (7 m)
- **Polarization** Linear
- **Radiation pattern on metal**



## Key Features

- + **688 bits user memory:** data storage
- + **250°C:** withstand high temperatures
- + **10m read range:** read from a distance
- + **Stainless steel inserts:** rugged mounting systems
- + **IP68 rating:** waterproof

## Applications

- **High temperature production**
- **Work in process**
- **Automotive assembly**
- **RTI management**

## Environmental Specifications

### Temperatures



- Operational -40°C to +85°C
- Survival -40°C to +250°C
- High temperature cycle 250°C (500 hours)

### Chemicals<sup>4</sup>



- 24h H<sub>2</sub>SO<sub>4</sub> (10% sulfuric acid)
- 24h HNO<sub>3</sub> (10% nitric acid)
- 24h H<sub>3</sub>PO<sub>4</sub> (20% phosphoric acid)
- 24h H<sub>2</sub>O<sub>2</sub> (25% hydrogen peroxide)
- 24h NaOH (10% sodium hydroxide)

- **IP rating** IP68
- **Compression strength** 181 psi (1250 kPa)
- **Shock** 3ft (1 m) to concrete/granite

- **Vibration** MIL-STD-810G
- **Warranty** 1 year

<sup>1</sup> The chip data retention is up to 50 years, based on chip operating under general environment conditions.

<sup>2</sup> EPC can be re-programmed, password protected, or permanently locked. TID is locked and unique at the point of manufacturing.

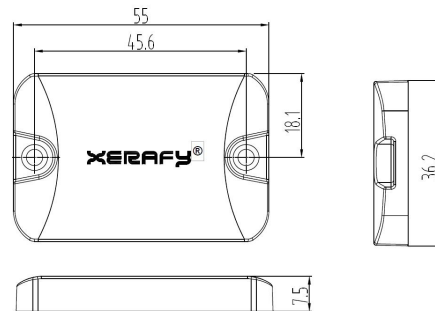
<sup>3</sup> Performance based on standard testing methodologies. Performance may vary depending on environmental factors and reader output power.

<sup>4</sup> The chemical resistance is based on the concentration of solutions and application environment. Please contact Xerafy for further details on chemical resistance.



## Physical Specifications

- **Material** Industry grade polymer, 316L Stainless steel
- **Dimensions (in)**<sup>1</sup> 2.16 × 1.43 × 0.30
- **Dimensions (mm)**<sup>1</sup> 55 × 36.20 × 7.50
- **Weight** 0.92 oz (26 g)
- **Packing information** 92 pcs /one box

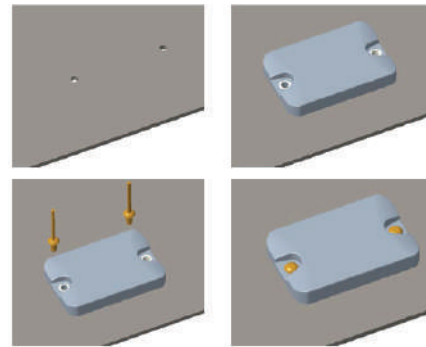


## Mounting Systems

- Pop rivets
- Screws
- Industrial adhesive (optional)

## Installation Instructions

1. Use M3 rivets for attachment:
    - Drill two holes (Ø 3.50) in the metal surface, pitch: 45.60 mm.
    - Utilize M3 rivets in conjunction with a rivet gun to securely fasten the tag onto the metal surface.
  2. Use M3 screws for attachment:
    - Drill two holes (Ø 2.20) in the metal surface, pitch: 45.60 mm.
    - Perform a M3 thread tapping procedure.
    - Utilize M3 screws to securely attach the tag to the metal surface.
- \* Can also be attached via adhesive / epoxy.



<sup>1</sup> Tolerance: +/- 0.02; +/- 0.50 mm

## Industry Compliance



## Order Information

MICRO Industrial US: X1130-US100-H9

MICRO Industrial EU: X1130-EU100-H9

## Customization Options

Encoding

Laser Marking

ATEX Certified Version

Printing

Industrial Adhesive

Metal Backplate

The information provided by Xerafy Singapore Pte. Ltd. is for general information purposes only. All information on the datasheet is provided in good faith. However, we make no representation or warranty of any kind, express or implied, regarding the accuracy, adequacy, validity, reliability, availability, or completeness of any information on the datasheet.

Under no circumstance shall we have any liability to you for any loss or damage of any kind incurred as a result of the use of the product or reliance on any information provided on the datasheet. Your use of the product and your reliance on any information on the datasheet is solely at your own risk.