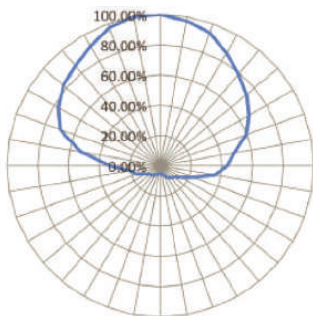




# MICRO INDUSTRIAL

## 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; 48 bits TID; 688 bits user memory
- **Write cycles** 100,000 cycles
- **Read range** fixed<sup>3</sup> Up to 32.81 ft (10 m)
- **Read range** handheld<sup>3</sup> Up to 22.97 ft (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 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.

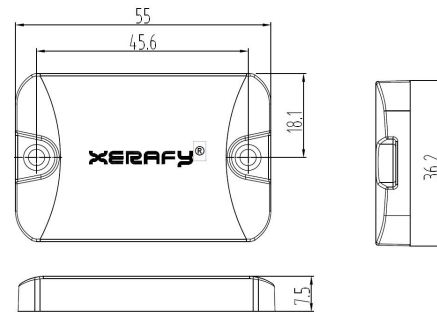
<sup>3</sup> Performance based on standard testing methodologies. Performance may vary depending on environmental factors and reader output power.

<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

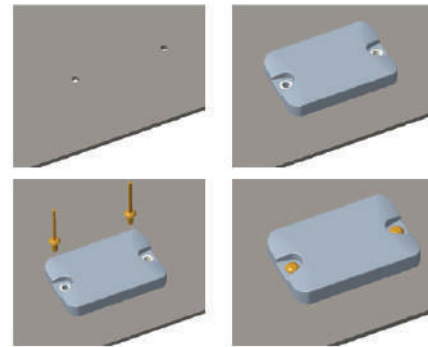


## Mounting Systems

- Pop rivets
- Screws
- Industrial adhesive (optional)

## Installation Instructions

1. Use M3 rivets for attachment:
    - Drill two holes (∅ 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 (∅ 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

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