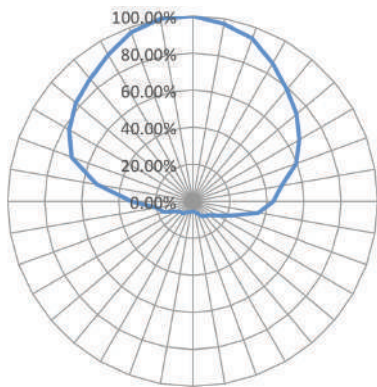# MICRO AUTOCLAVABLE

Technical Specifications

- **RF protocol** EPC global Class 1 Gen 2
- **Frequency** 902-928 MHz (US); 865-868 MHz (EU)
- **IC type** (chip)[1] Alien Higgs 9
- **Chip memory**[2] 96 bits EPC; 48 bits TID; 688 bits user memory
- **Read range** fixed[3] Up to 32.81 ft (10 m)
- **Read range** handheld[3] Up to 22.97 ft (7 m)
- **Polarization** Linear
- **Radiation pattern on metal**

Key Features

- **+ Autoclave proof:** withstand cleaning and sterilization cycles
- **+ 150°C:** withstand high temperatures
- **+ 688 bits user memory:** data storage
- **+ Stainless steel inserts:** rugged mounting systems

Applications

- **Autoclave sterilization**
- **Surgical trays**
- **Medical devices**
- **Healthcare equipment**

Environmental Specifications

Temperatures
- Operational -40°C to +85°C
- Survival -40°C to +150°C
- High temperature cycle 150°C (600 hours)

Chemicals[4]
- 24h H_2SO_4 (10% sulfuric acid)
- 24h HNO_3 (10% nitric acid)
- 24h H_3PO_4 (20% phosphoric acid)
- 24h H_2O_2 (25% hydrogen peroxide)
- 24h NaOH (10% sodium hydroxide)

- **IP rating** IP69K
- **Compression strength** 181 psi (1250 kPa)
- **Shock** 3ft (1 m) to concrete/granite

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

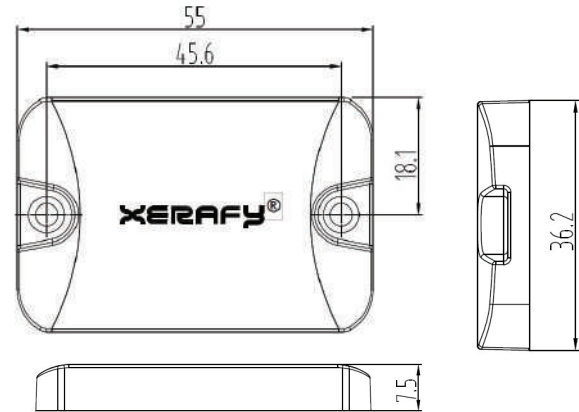[1] The chip data retention is up to 50 years, based on chip operating under general environment conditions.
[2] EPC can be re-programmed, password protected, or permanently locked. TID is locked and unique at the point of manufacturing.
[3] Performance based on standard testing methodologies. Performance may vary depending on environmental factors and reader output power.
[4] 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, Silicone
- **Dimensions (in)**[1] 2.01 x 1.43 x 0.30
- **Dimensions (mm)**[1] 55 x 36.20 x 7.50
- **Weight** 0.92 oz (26 g)
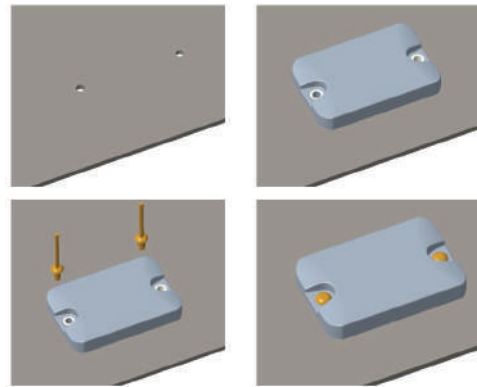- **Packing information** 76 pcs /one box

Mounting Systems

- Pop rivets
- Screws

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.

[1] Tolerance: +/- 0.02; +/- 0.50 mm

Industry Compliance

Order Information

MICRO Autoclavable US: X1130-US140-H9	MICRO Autoclavable EU: X1130-EU140-H9

Customization Options

Encoding	Printing
Laser Marking	Industrial Adhesives
ATEX Certified Version	Metal Backplate