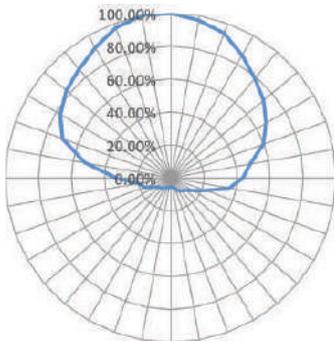




## MICRO AUTOCLAVE

### 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> NXP UCODE 9xm
- **Chip memory**<sup>2</sup> 128/496 bits EPC; 96 bits TID; 752/384 bits user memory
- **Write cycles** 100,000 times
- **Data retention** 20 years
- **Read range fixed**<sup>3</sup> Up to 49.21 ft (15 m)
- **Read range handheld**<sup>3</sup> Up to 32.81 ft (10 m)
- **Polarization** Linear
- **Radiation pattern on metal**



### Environmental Specifications

#### Temperatures

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

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

### Key Features

- + **Autoclave proof:** withstand cleaning and sterilization cycles
- + **150°C:** withstand high temperatures
- + **Up to 752 bits user memory:** data storage
- + **Stainless steel inserts:** rugged mounting systems

### Applications

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

#### 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)

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

<sup>1</sup>The chip data retention is up to 20 years, based on chip operating under general environment conditions.

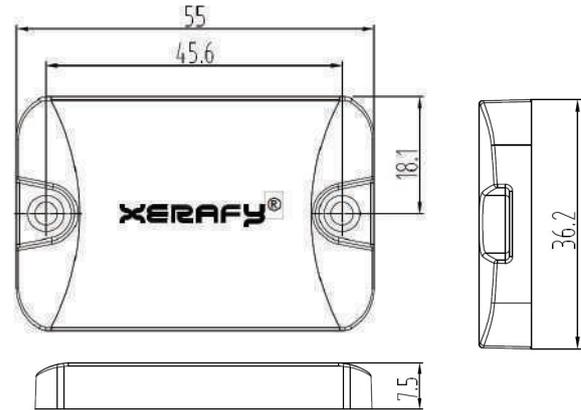
<sup>2</sup>EPC can be re-programmed, password protected, or permanently locked. TID is locked and unique at the point of manufacturing.

<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, Silicone
- **Dimensions (in)**<sup>1</sup> 2.01 x 1.43 x 0.30
- **Dimensions (mm)**<sup>1</sup> 55 x 36.20 x 7.50
- **Weight** 0.92 oz (26 g)
- **Packing information** 76 pcs /one box

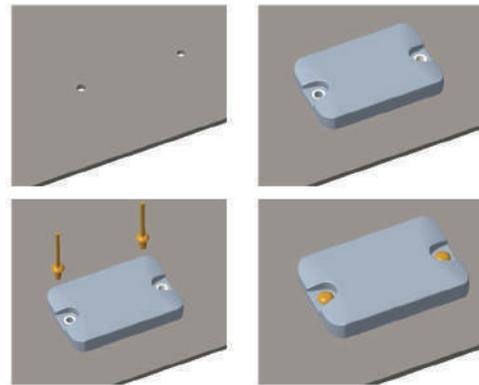


## Mounting Systems

- Pop rivets
- Screws

## Installation Instructions

1. Use M3 rivets for attachment:
  - Drill two holes ( $\varnothing$  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 ( $\varnothing$  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.



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

## Industry Compliance



RAIN  
ALLIANCE



## Order Information

MICRO Autoclave US: X1130-US140-U9xm

MICRO Autoclave EU: X1130-EU140-U9xm

## Customization Options

Encoding

Laser Marking

ATEX Certified Version

Printing

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.