

Micro^X II-Autoclavable Version



Functional Specifications

RF air protocol	EPCGlobal Class1Gen 2; ISO18000-6C
Operational frequency	UHF 902-928 MHz (US); 866-868 MHz (EU)
IC type	Alien Higgs-3
Memory configuration	96-EPC bits; 512-bit user memory
Functionality	Read / write (user programmed)
Memory – expected read / write cycles	100,000 cycles at 77°F (25°C)
Data retention	Up to 50 years ¹
Read rate	400 tags per second for 96-EPC bit number
Warranty (limited)	1 year
Applicable surface	Metal surfaces
Material	Engineering-grade nylon polymer
Color	Charcoal
Weight	0.98 oz (28 g)
Application	Medical devices
Mounting surface	Metal

Performance Characteristics

Read range on metal (2W ERP) ²	Up to 33 ft (10 m)
Polarization	Linear



¹ The chip data retention is based on chip operating under general environment conditions.

² Actual read range may vary based upon use case and attachment methods.

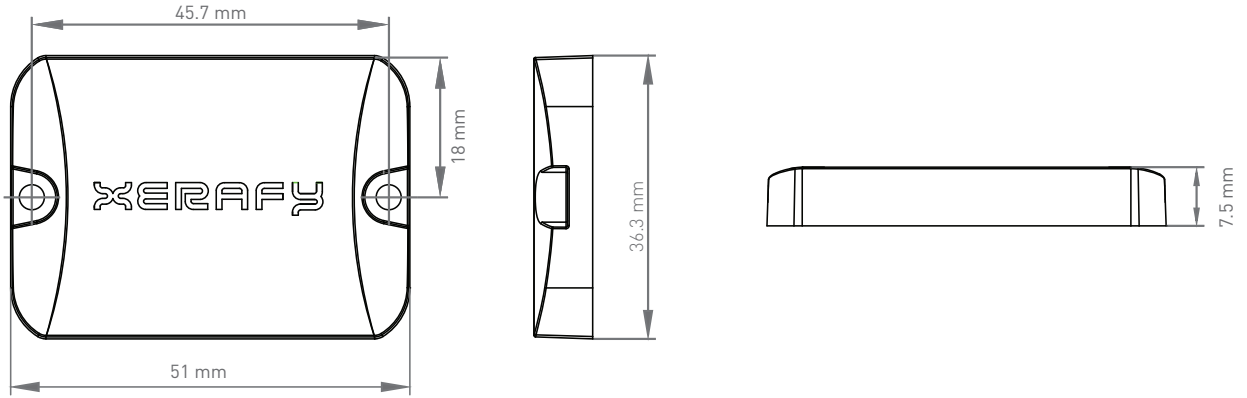
Environmental and Industry Compliance

FDA class	Class I
Compression strength	181 psi (1250 kPa)
IP classification	IP69K ³
Standard compliancy	RoHS (EU Directive 2011/65/EU) , CE(EU version)
Operational temperature (MIL STD 810-F)	-40°F to +185°F (-40°C to +85°C)
Application temperature (MIL STD 810-F)	-40°F to +302°F (-40°C to +150°C)
Humidity	
Operational humidity	5%-95% non-condensing
Storage humidity	5%-95% non-condensing

Cleaning and Disinfection Process (ANSI/AAMI ST79)

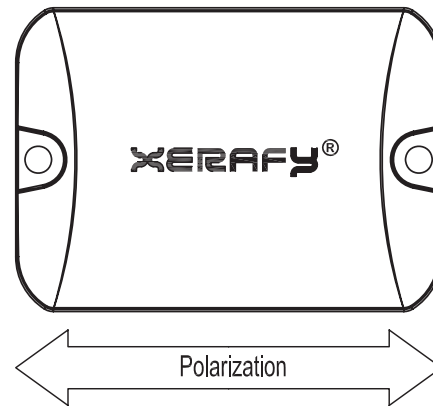
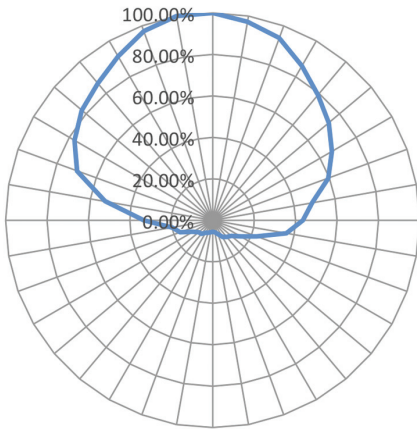
Chemical sterilization for decontamination Liquid chemical sterilants include glutaraldehyde, hydrogen peroxide, hydrogen peroxide-peracetic acid combinations, sodium hypochlorite, and peracetic acid.	Pass
Thermal (hot water) disinfection <ul style="list-style-type: none"> Washer-sanitizers, washer-decontaminators, utensil washers, and cart washers reduce microbial contamination by means of cleaning agents, hot water, rinsing, and drying. Pasteurization equipment provides cleaning and high-level disinfection at water temperatures of 65°C to 77°C (150°F to 170°F) for a contact time of at least 30 minutes. Washer-disinfectors provide a cycle of cleaning, rinsing, disinfection, and drying at temperatures that are usually higher than those of washer-sanitizers 	Pass
Thermal sterilization for decontamination Saturated steam can be used to decontaminate devices capable of withstanding high temperatures (121°C to 135°C [250°F to 275°F]) and pressures (16 to 35 psig). Washer-sterilizers provide cleaning and rinsing followed by exposure to saturated steam at temperatures of 121°C to 135°C (250°F to 275°F).	Pass
Ultrasonic cleaner 3KHz for 30 min	Pass
Disinfection by light C wave ultraviolet and wavelength range is from 200nm to 275nm	Pass
Detergent enzyme cleaner	Pass
Autoclave sterilization 134 °C and 0.6 Mpa for more than 1000 cycles	Pass

Product Dimensions



Dimensions (mm)	51 x 36.3 x 7.5
tolerance	+/- 0.5 mm
Dimensions (in)	2.01 x 1.43 x 0.30
tolerance	+/- 0.02 in
Rivet hole diameter	0.126 in +/-0.008 (3.2 mm +/- 0.2)

Radiation Pattern and Polarization



Radiation Pattern: Radiation pattern refers to the directional (angular) dependence of the strength of the radio waves from the antenna or other source.

Polarization direction is the necessary requirement of best performance, so we have to make sure the Reader have the same polarization direction with tag.

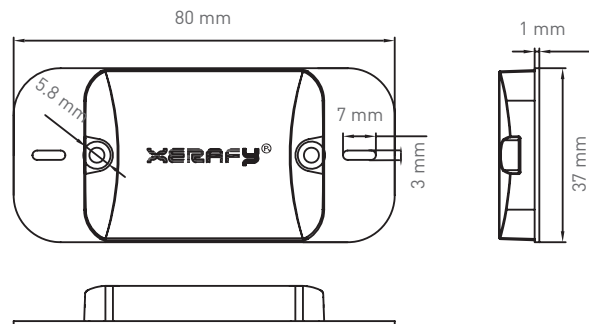
Installation instructions

Step1: The tag will be fixed with metal bracket,

- Screws (Rivet hole, M3)
- Pop rivets (3mm)

Step2: The tag with bracket can be attached in several methods:

- Screws (Rivet hole, M3)
- Pop rivets (3mm)
- Welding



Personalization options

Several options are available:

- Tag programming
- Customized laser engraving

Order information

X1130-US140-H3

Autoclaveable Micro XII US

X1130-EU140-H3

Autoclaveable Micro XII EU