

## Autoclavable Roswell



### Functional Specifications

RF air protocol	EPC Class 1 Gen 2; ISO18000-6C
Operating frequency	UHF 902-928 MHz (US); 866-868 MHz (EU)
IC type	Alien Higgs-3
Memory configuration	96-bit EPC ; 512-bit user memory; 64-bit TID
Functionality	Read / write
Memory – expected read / write cycles	100,000 cycles at 77°F (25°C)
Data retention	Up to 50 years <sup>1</sup>
Read rate	400 tags per second for 96-EPC bit number
Warranty (limited)	1 year

### Performance Characteristics

Read range on metal [2W ERP] <sup>2</sup>	Up to 16.4 ft (5 m)
Polarization	Linear

### Physical Specifications

Material	Stainless steel
Attachment	Welding, cable tie, rivet hole ø 0.19 in (ø 5 mm)
Color	Stainless steel

### Environmental and Industry Compliance

RoHS	EU Directive 2002/95/EC
ATEX	ATEX Compliant
Healthcare sterilization compliance	ISO 17665 - Moist Steam, ISO 11135 - Ethylene Oxide
FDA class	Class I



<sup>1</sup> The chip data retention is based on chip operating under general environment conditions.

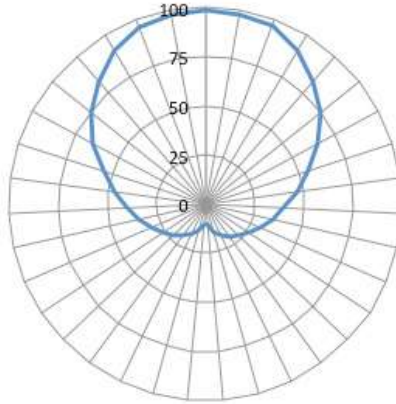
<sup>2</sup> Actual read range may vary based upon use case and antenna power.

## Cleaning and Disinfection Process (ANSI/AAMI ST79)

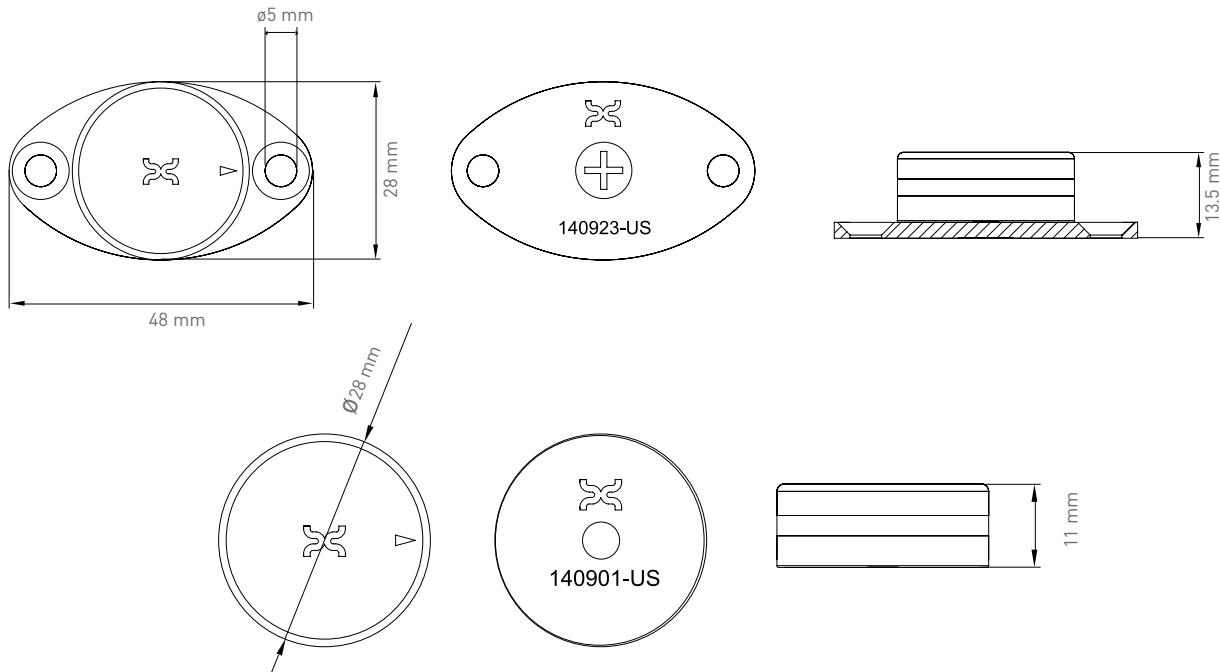
<b>Chemical sterilization for decontamination</b> Liquid chemical sterilants include glutaraldehyde, hydrogen peroxide, hydrogen peroxide-peracetic acid combinations, sodium hypochlorite, and peracetic acid.	Pass
<b>Thermal (hot water) disinfection</b> <ul style="list-style-type: none"> <li>Washer-sanitizers, washer-decontaminators, utensil washers, and cart washers reduce microbial contamination by means of cleaning agents, hot water, rinsing, and drying.</li> <li>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.</li> <li>Washer-disinfectors provide a cycle of cleaning, rinsing, disinfection, and drying at temperatures that are usually higher than those of washer-sanitizers</li> </ul>	Pass
<b>Thermal sterilization for decontamination</b> 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
<b>Ultrasonic cleaner</b> 3KHz for 30 min	Pass
<b>Dry heat sterilization</b> 160°C for 2h, or 170°C for 1h, or 180°C for 30min	Pass
<b>Disinfection by light</b> C wave ultraviolet and wavelength range is from 200nm to 275nm	Pass
<b>Detergent enzyme cleaner</b>	Pass
<b>Autoclave sterilization</b> 121°C and 115Kpa for 1000 cycles	Pass

## Operational and Environmental Specifications

Operational temperature	
Cold	-40°F (-40°C)
Dry heat (Long term, days/weeks/years)	+185°F (+85°C)
Application temperature	
Cold	-40°F (-40°C)
Dry heat (Short term, minutes/hours)	+482°F (+250°C)
Temperature cycling testing	6 hours at +250°C, 18 hours cool-down, 30 days test cycle
Humidity	
Operational humidity	5%-95% non-condensing
Storage humidity	5%-95% non-condensing
Compression strength	1145 psi (7900 kPa)
Drop	3 ft (1 m) to concrete/granite up to 100 cycle
Vibration	MIL-STD-810F
IP classification	IP69K



**Product Dimensions and Weight**



Dimensions / tolerance (mm)	48 x 28 x 13.5 (+/- 0.5)
Dimensions / tolerance (in)	1.89 x 1.10 x 0.53 (+/- 0.02)
Weight / tolerance	1.55 oz / 44 g (+/- 10%)
Dimensions w/o bracket / tolerance (mm)	∅ 28 x 11 (+/- 0.5)
Dimensions w/o bracket / tolerance (in)	∅ 1.10 x 0.43 (+/- 0.02)
Weight / tolerance (w/o bracket)	0.92 oz / 26 g (+/- 10%)

**Order information**

X1114-US141-H3	Autoclavable Roswell w/ Bracket US
X1114-EU141-H3	Autoclavable Roswell w/ Bracket EU
X1114-US140-H3	Autoclavable Roswell w/o Bracket US
X1114-EU140-H3	Autoclavable Roswell w/o Bracket EU