

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 ¹
Read rate	400 tags per second for 96-EPC bit number
Warranty (limited)	1 year

Performance Characteristics

Read range on metal [2W ERP] ²	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 2011/65/EU
ATEX	ATEX Compliant
Healthcare sterilization compliance	ISO 17665 - Moist Steam, ISO 11135 - Ethylene Oxide
FDA class	Class I



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 antenna power.

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

- Washer-sanitizers, washer-decontaminators, utensil washers, and cart washers reduce microbial contamination by means of cleaning agents, hot water, rinsing, and drying. Pass
- 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

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

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

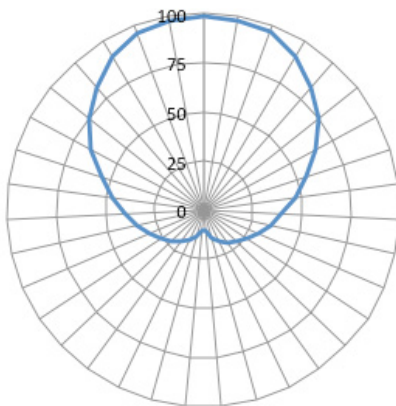
3 ft (1 m) to concrete/granite up to 100 cycle

Vibration

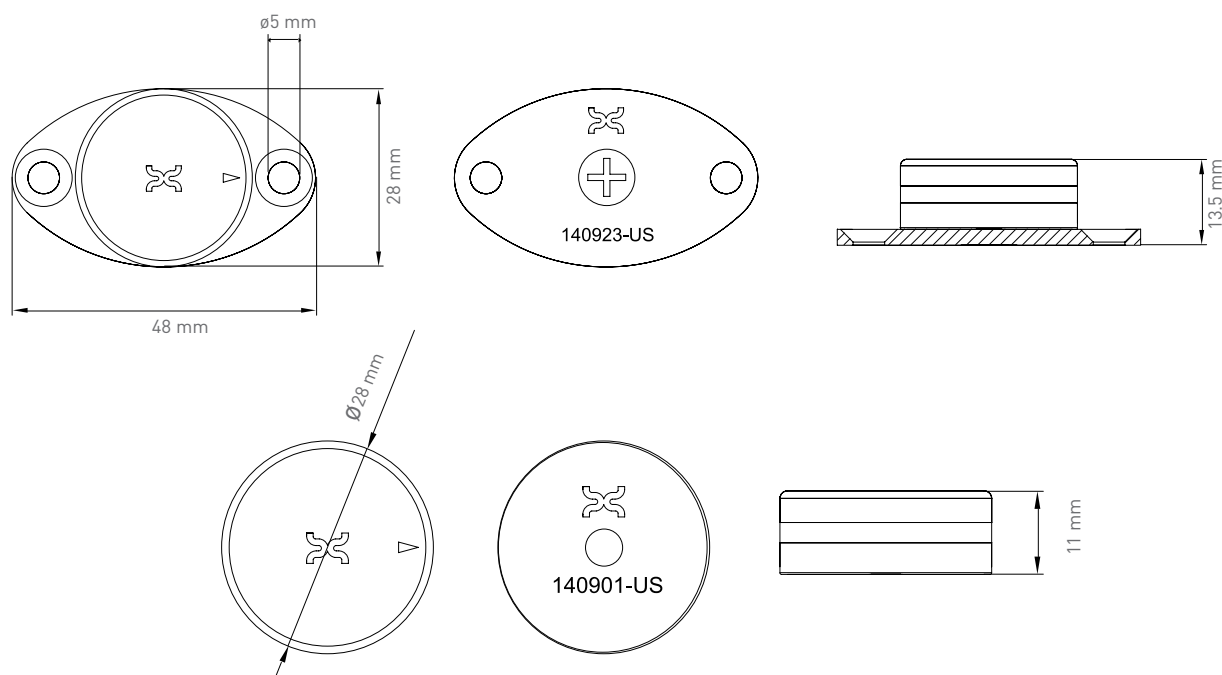
MIL-STD-810F

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)	Ø 28 x 11 (+/- 0.5)
Dimensions w/o bracket / tolerance (in)	Ø 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