

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	Aluminum 6061-T6
Attachment	Cable tie, rivet hole ø 0.19 in (ø 5 mm)
Color	Dark grey

Environmental and Industry Compliance

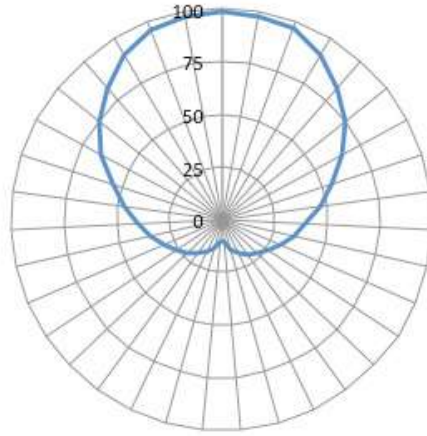
RoHS	EU Directive 2002/95/EC
ATEX	ATEX Compliant



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.

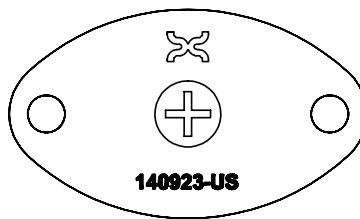
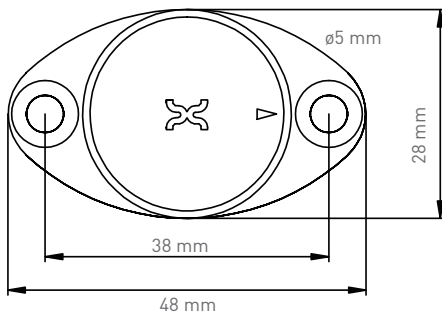
Radiation Pattern

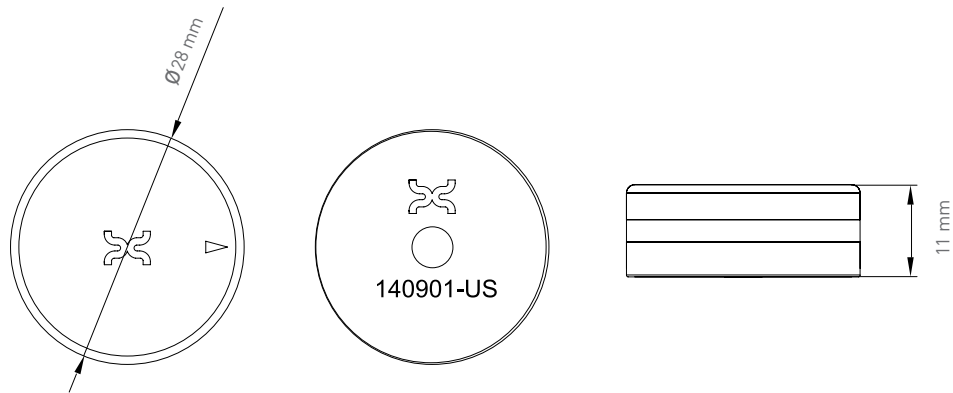


Operational and Environmental Specifications

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	549 psi (3785 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	0.74 oz / 21 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)	0.51 oz / 14.4 g (+/- 10%)

Order information

X1114-US101-H3	Roswell w/ Bracket US
X1114-EU101-H3	Roswell w/ Bracket EU
X1114-US100-H3	Roswell w/o Bracket US
X1114-EU100-H3	Roswell w/o Bracket EU