

Autoclavable Roswell w/o bracket



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
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

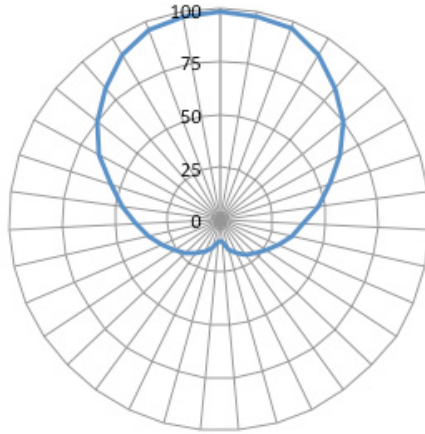
RoHS&REACH	EU Directive 2011/65/EU, EC1907/2006
CE	Yes
ATEX/IECEX	Certified



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.

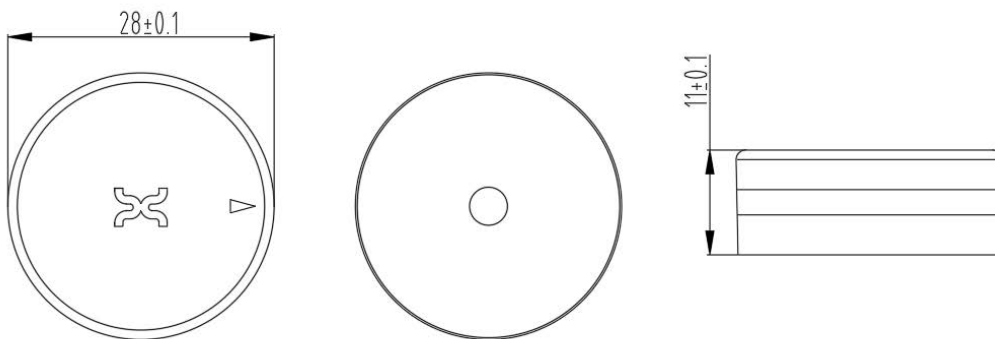
Radiation Pattern



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	115 psi (793 kPa)
Drop	3 ft (1 m) to concrete/granite up to 100 cycle
Vibration	MIL-STD-810G
IP classification	IP68

Product Dimensions and Weight



Dimensions / tolerance (mm)	∅14 x 11 (+/- 0.1)
Dimensions / tolerance (in)	∅0.55x 0.43(+/- 0.03)
Weight / tolerance	0.99oz / 28g (+/- 10%)

Order information

X1114-US140-H3	Autoclave Roswell w/o Bracket US
X1114-EU140-H3	Autoclave Roswell w/o Bracket EU