# Roswell



Roswell, the first tag of its kind, uses only its metal exterior as an antenna. It's ATEX certified for hazardous environments in the oil and gas and automotive industries. Its patent-pending antennafree design enables item-level tracking for demanding applications.





Survives extended high temp exposure







- Oil & Gas Valve / Wellhead Management
- Food Processing Plants
- Automotive Manufacturing

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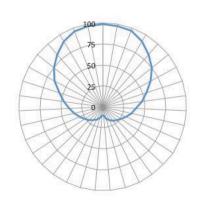
| Performance Characteristics        |   |  |
|------------------------------------|---|--|
| Read range (handheld) <sup>1</sup> | Up to 11.5 ft (3.5 m)                                 |  |
| Read range (fixed) <sup>1</sup>    | Up to 16.4 ft (5 m)                                   |  |
| Polarization                       | Linear  |  |
| Mounting system                    | Screws (Rivet hole, ø 0.19 in<br>(ø 5 mm)), Cable tie |  |

 Performance based on standard testing methodologies.
 Performance may vary depending on environmental factors and reader output power.

| Functional Specifications |  |  |
|---------------------------|--|--|
| RF protocol               | EPC global Class 1 Gen2                                    |  |
| Frequency                 | 902-928 (US); 865-868 (EU)                                 |  |
| IC type (chip)1           | Alien Higgs-3  |  |
| Memory                    | 96-EPC bits,<br>64-bit unique TID,<br>512 -bit user memory |  |
| Material                  | Aluminum 6061-T6   |  |

1. The chip data retention is up to 50 years, based on chip operating under general environment conditions.

## **Radiation Pattern**





# Environmental Specifications Operational temperature -40°C to +85°C Survival temperature -40°C to +250°C Chemical resistance Various caustic chemicals¹ IP rating IP69K Compression strength 115 psi (793 kPa) Shock (drop) 3 ft (1 m) to concrete/granite Vibration MIL-STD-810G

 The chemical resistance is based on the concentration of solutions and application environment. Please contact Xerafy for further details on chemical resistance.

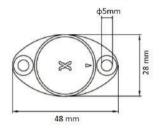
| Industry Compliance |                         |
|---------------------|-------------------------|
| RoHS                | EU Directive 2011/65/EU |
| CE                  | Yes                     |
| ATEX/IECEx          | Compliant               |
| Warranty            | 1 year                  |

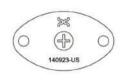
| Order Information |                                     |
|-------------------|-------------------------------------|
| X1114-US101-H3    | Roswell w/ Bracket US               |
| X1114-EU101-H3    | Roswell w/ Bracket EU               |
| Optional service  | Encoding / Printing / Laser etching |

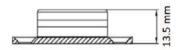


# Product Dimensions and Weight

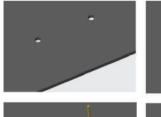
| Dimensions (in) | 1.89 x 1.10 x 0.53 |
|-----------------|--------------------|
| Tolerance       | +/- 0.02           |
| Dimensions (mm) | 48 x 28 x 13.5     |
| Tolerance       | +/- 0.5            |
| Weight          | 0.74 oz (21 g)     |





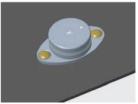


### **Installation Instructions**









- 1. Put the tag orientation with symbol "X" in parallel to length of the metal surface.
- 2. When the tag is used in harsh environment, M4.8 screw /  $\phi$ 4.8 rivet mounting is a suitable option. (screw hole: 0.19 in/4.5 mm, rivet hole: 0.19 in / 5 mm)

### **About Xerafy**

Xerafy designs and manufactures the world's toughest RFID tags to power Industrial IoT applications in Aerospace, Oil & Gas, Automotive, Healthcare and Manufacturing.

