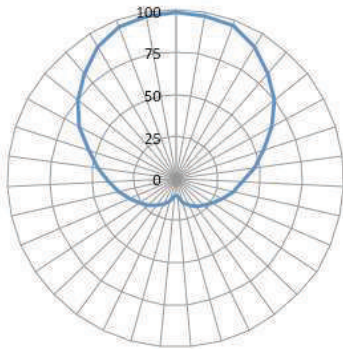




ROSWELL

Technical Specifications

- **RF protocol** EPC global Class 1 Gen 2
- **Frequency** 902-928 MHz (US);
865-868 MHz (EU)
- **IC type (chip)**¹ Alien Higgs 3
- **Chip memory** 96/480 bits EPC; 96 bits TID; 512 bits user memory
- **Read range** fixed² Up to 16.40 ft (5 m)
- **Read range** handheld² Up to 11.48 ft (3.50 m)
- **Polarization** Linear
- **Radiation pattern on metal**



Key Features

- + **250°C:** withstand high temperatures
- + **180° readable:** wider read angles
- + **Aluminum case:** withstand high pressures, compression, chemicals
- + **Backplate:** secure mounting options
- + **IP68 rating:** for waterproof

Applications

- Oil & Gas valve / Wellhead management
- Food processing plants
- Automotive manufacturing

Environmental Specifications

Temperatures



- Operational -40°C to +85°C
-40°F to +185°F
- Survival -40°C to +250°C
-40°F to +482°F

Chemicals³



- 12h H₂SO₄ (10% sulfuric acid)
- 12h HNO₃ (10% nitric acid)
- 12h H₃PO₄ (20% phosphoric acid)
- 12h H₂O₂ (25% hydrogen peroxide)

- **IP rating** IP68
- **Compression strength** 115 psi (793 kPa)
- **Shock** 3ft (1 m) to concrete/granite

- **Vibration** MIL-STD-810G
- **Warranty** 1 year

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

² Performance based on standard testing methodologies. Performance may vary depending on environmental factors and reader output power.

³ The chemical resistance is based on the concentration of solutions and application environment. Please contact Xerafy for further details on chemical resistance.

Physical Specifications

- **Material** Aluminum, High-performance engineered polymer
- **Dimensions (in)**¹ 1.89 x 1.10 x 0.53
- **Dimensions (mm)**¹ 48 x 28 x 13.50
- **Weight** 0.74 oz (21 g)

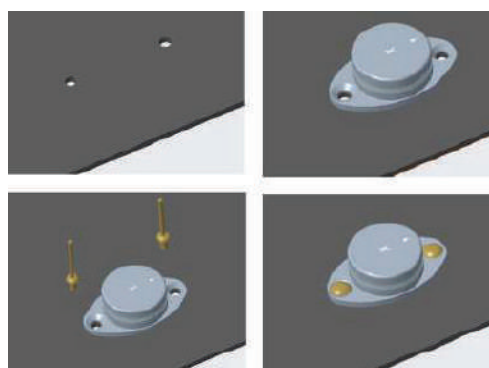
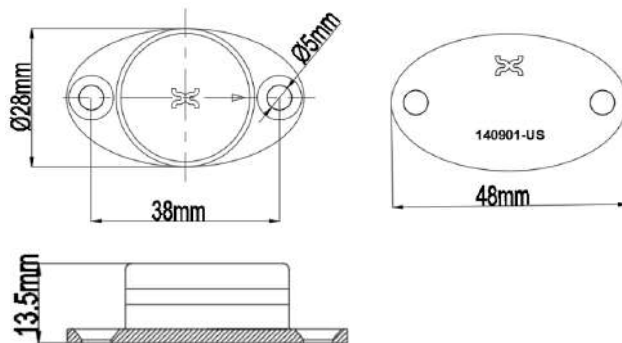
Mounting Systems

- Welding
- Rivets
- Screws
- Cable tie

Installation Instructions

1. Position the tag in alignment with the metal surface's length, ensuring that the "X" symbol is parallel to the same direction.
2. Use M4 rivets for attachment:
 - Drill two holes (Ø 5) in the metal surface, pitch: 38 mm.
 - Utilize M4 rivets in conjunction with a rivet gun to securely fasten the tag onto the metal surface.
3. Use M4 screws for attachment:
 - Drill two holes (Ø 3.20) in the metal surface, pitch: 38 mm.
 - Perform a M4 thread tapping procedure.
 - Utilize M4 screws to securely attach the tag to the metal surface.

¹ Tolerance: +/- 0.02; +/- 0.50



Industry Compliance



Order Information

ROSWELL US: X1114-US101-H3

ROSWELL EU: X1114-EU101-H3

Customization Options

Encoding

Laser Marking

Printing

ATEX Certified Version

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